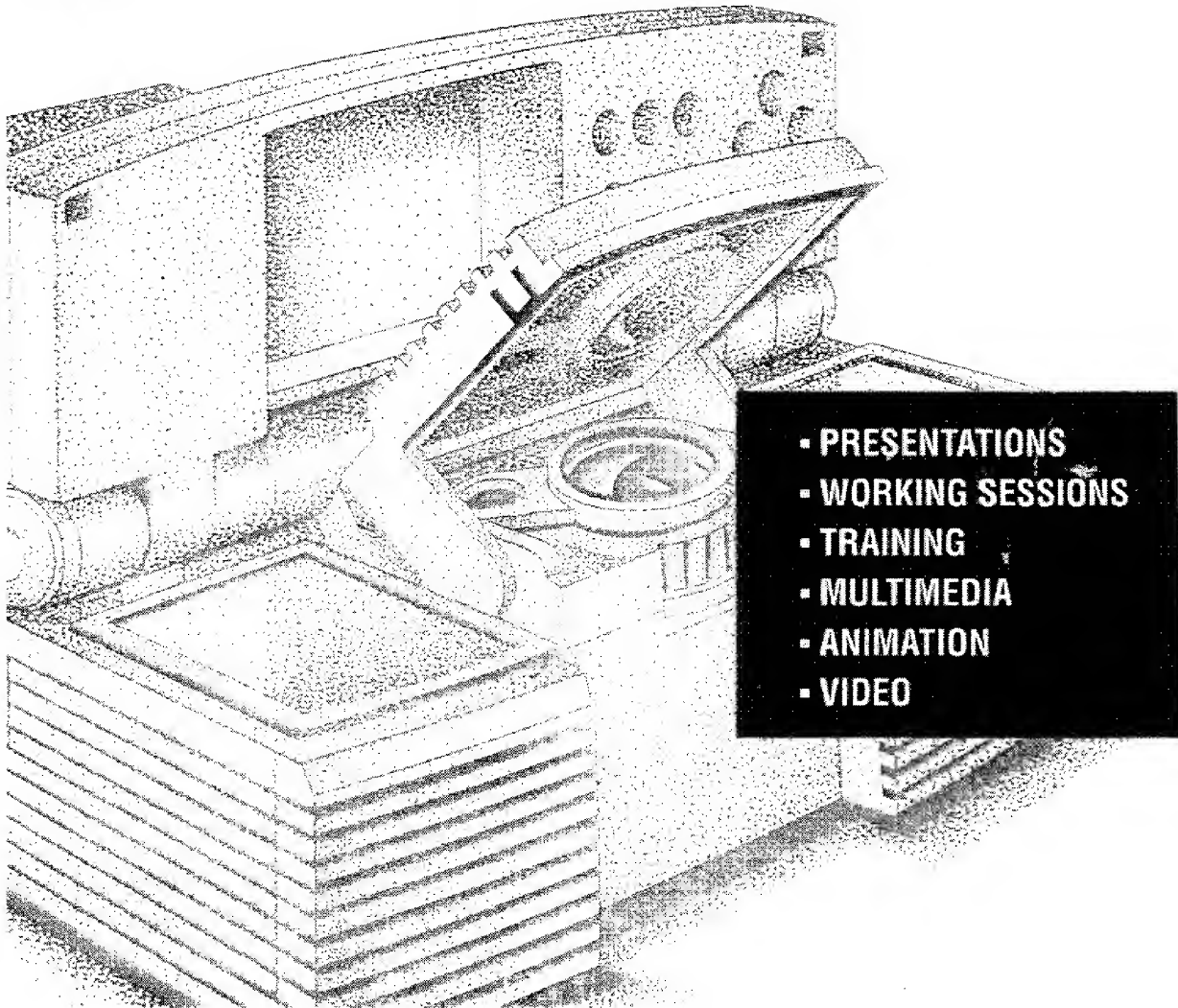


USER'S GUIDE

NW

PROXIMA®  
**Desktop Projector™**

Multimedia LCD Projectors  
(Models DP2800 and DP2700)



---

## Quick Setup Procedures

1. Place the projector on a solid flat surface at a right angle (perpendicular) to the projection screen and parallel to the floor.
2. Raise the cover assembly until it clicks into place.
3. Raise the mirror assembly into its fully open position.

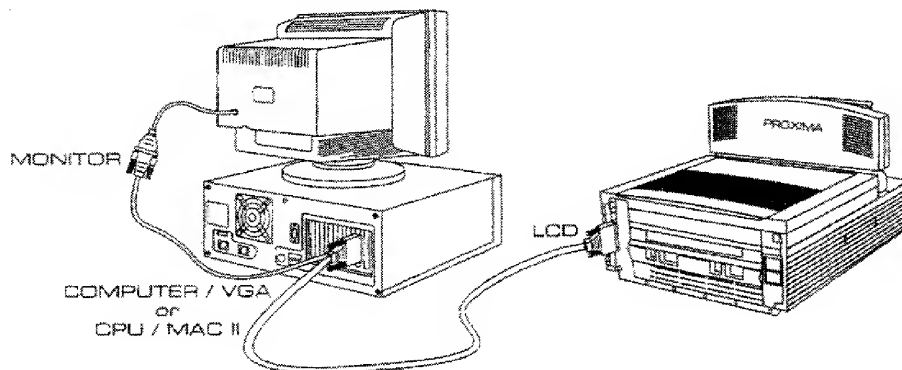
*For steps 4-7, select the appropriate procedure for your system:*

### Desktop Computers

4. Turn off the computer, monitor, and Desktop Projector.
5. Unplug the monitor cable from the computer and attach it to the MONITOR end of the "Y" cable.
6. Plug the "Y" cable's COMPUTER (or CPU) end into the computer's monitor port.
7. Insert the "Y" cable's LCD end into the projector's COMPUTER port.

### Notebooks/Laptops

4. Turn off the computer and the Desktop Projector.
5. Plug the "Y" cable's COMPUTER (or CPU) end into the computer's monitor port.
6. Insert the "Y" cable's LCD end into the projector's COMPUTER port.
7. Attach the Macintosh or VGA video terminator to the "Y" cable's MONITOR end.



8. Connect video and audio sources to the projector:

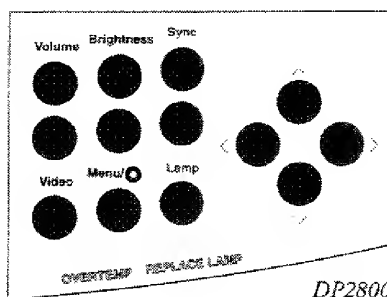
CONNECTOR PANEL	FUNCTION/CABLE	CONNECTIONS
COMPUTER Both models	Connects computer video to projector. - VGA video "Y" cable (C454-6) - Macintosh video "Y" cable (C464-6)	Projector: LCD Monitor: MONITOR Mac: CPU/MAC II IBM: COMPUTER/VGA
RS-232 Both models	For optional Cyclops system or Presentation Control Software - Din 8-to-DB9 IBM serial data cable (C933-6) - Macintosh ADB data cable (C934-6)	Installation instructions included with Cyclops system or software
VIDEO IN DP2600 and DP2700 with video upgrade	Video input from NTSC, PAL or SECAM. - Composite video/audio cable (C497-6)	Projector: VIDEO IN - Yellow RCA plug Source: VIDEO OUT - Yellow RCA plug
S-VHS DP2600 and DP2700 with video upgrade	S-VHS or S-Video input. - S-Video cable (C486-6)	Projector: VIDEO IN - Mini Din 4 Source: VIDEO OUT - Mini Din 4
COMPUTER AUDIO IN DP2600 only	Audio input from computer or microphone. - Computer audio cable (C498-6)	Projector: COMPUTER AUDIO IN - RCA plugs Source: AUDIO OUT - Mini jack
AUDIO IN DP2600 only	Audio input from NTSC/PAL/SECAM/S-VHS source or microphone. - Composite video/audio cable (C497-6)	Projector: L/R AUDIO IN - White (L)/Red (R) RCA plugs Source: L/R AUDIO OUT - White (L)/Red (R) RCA plugs
AUDIO OUT DP2600 only	Connects an external speaker system. - Computer audio cable (C498-6)	Projector: AUDIO OUT - Mini jack External Amplifier: L/R AUDIO IN - L/R RCA plugs

9. Power up the Desktop Projector and external monitor *before* turning on the computer so that each display is properly sensed during the computer's boot-up sequence.
10. Rotate the projector's focus ring for the clearest displayed image. Use the title screen image that appears when you first power up the projector.

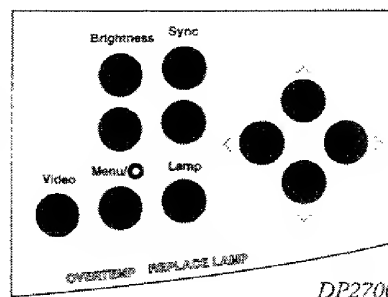


**Note:** The Connector Panel's RS-232 port can be used with the optional Cyclops interactive pointer system or Proxima's Presentation Control Software. Installation instructions are included with Cyclops and the software.


## Control Panel



DP2800



DP2700

CONTROL	FUNCTION
VOLUME	Adjusts the audio level of the projector's internal speakers (DP2800 only).
BRIGHTNESS	Increases/decreases the brightness of the projected image.
SYNC	Compensates for fine variations in the timing of the computer video signal.
VIDEO	Switches between computer video, NTSC/PAL/SECAM video, or S-VHS.
MENU / 	Press once to display the Levels Menu. Press again to display the Setup Menu. Press a third time to exit the Menu Window. Hold down for several seconds to initiate (optional) Cyclops light measurement sequence. Hold down when powering up projector to disable Cyclops.
LAMP	Toggles the projection lamp ON/OFF.
ARROWS	Makes small adjustments to the projected image's position. Changes Menu Window settings when in MENU mode. <ul style="list-style-type: none"> <li>- Press the Right/Left arrow key to move to the setting.</li> <li>- Press the Up/Down arrow key to change the setting.</li> </ul>

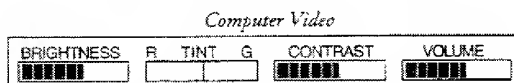
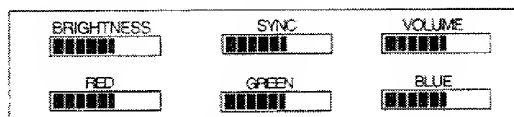
## Warning/Alert Lights

Warning and alert lights located on the projector's control panel provide you with an indication of the Desktop Projector's operating condition.

CONTROL	FUNCTION
OVERTEMP	Illuminates in the unlikely event the projector reaches an over-temperature condition.
REPLACE LAMP	Illuminates if the active and/or spare projector lamp has burned out.

## Levels Menu

Press the MENU/ key to display the Levels Menu. This menu varies automatically based on the type of video source displayed.

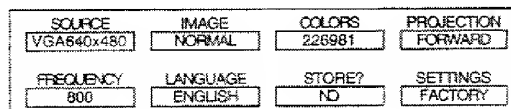


*NTSC/PAL/SECAM and S-VHS Video*

CONTROL	FUNCTION
BRIGHTNESS	Increases/decreases the overall brightness of the projected image.
SYNC	Compensates for fine variations in the timing of the computer video signal.
VOLUME	Adjusts the audio level of the projector's internal speakers (DP2800 only).
RED	Adjusts the red color signal for computer video.
GREEN	Adjusts the green color signal for computer video.
BLUE	Adjusts the blue color signal for computer video.
TINT	Adjusts the Red and Green color balance for NTSC/PAL/SECAM/S-VHS video.
CONTRAST	Adjusts the difference between light and dark segments of the projected image.

## Setup Menu

Press the MENU/ key a second time to display the Setup Menu.

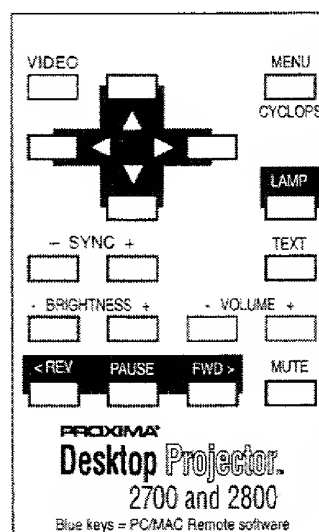


CONTROL	FUNCTION
SOURCE	Lists the name of the input source detected by the projector. Accessible in modes where other choices are available, based on the type of signal the projector is receiving.
IMAGE	Switches between NORMAL and REVERSE modes. REVERSE is used primarily for viewing text screens.
COLORS	Selects the color mode most suitable for the projected image.
PROJECTION	Flips the displayed image for use with a rear projection screen.
FREQUENCY	Synchronizes the projector with the video source. Note: Adjust SYNC before changing FREQUENCY.
LANGUAGE	Switches the language set used in the Menu Window: English, French, German, Italian, and Spanish.
STORE?	Saves settings currently displayed in both Menus.
SETTINGS	Retrieves factory-set or stored settings, or saves the current settings.

## Remote Control

The Remote Control contains all the key functions available on the Control Panel and provides access to additional functions not available on the Control Panel or through the Menu Window.

CONTROL	FUNCTION
MUTE	Toggles sound OFF/ON to the internal and external speakers
TEXT	Toggles between Graphics mode of 640 x 480 lines and Text mode of 720 x 400 lines. DOS text is easier to view when using Text mode.
REV PAUSE FWD	Works with Proxima's Presentation Control Software, which can be used to sequence electronic slides. Detailed instructions are included with the software.



## Getting Help

For technical support, please contact your dealer or call Proxima at:

U.S.A and Canada	Outside U.S.A. and Canada	Europe
(619) 457-5500 Press 1 for Customer Service. (619) 457-8542 (Fax)	(619) 457-5500 Press 1 for Customer Service. (619) 622-0173 (Fax)	+31-43-650 248 +31-43-649 220 (Fax)

### Proxima Corporation

Main Office:  
9440 Carroll Park Drive  
San Diego, CA 92121-2298  
United States of America

In Europe:  
Horsterweg 24  
6191 RX Beek  
The Netherlands

For Warranty, Patent and FCC compliance information, refer to the *Desktop Projector 2800 /2700 User's Guide*.

Proxima and Cyclops are registered trademarks of Proxima Corporation. Desktop Projector and trade dress are trademarks of Proxima Corporation.

**PROXIMA®**

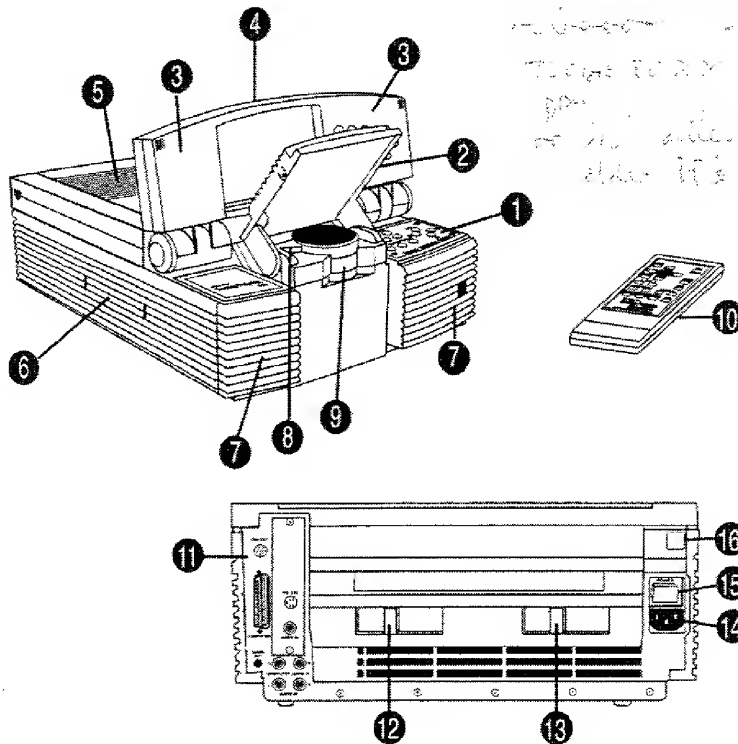
04/94

PROXIMA®

# Desktop Projector™

■ Model DP2800 and Model DP2700

QUICK  
REFERENCE  
GUIDE



The Proxima® Desktop Projector™ and Remote Control:

- |                                    |  |
|------------------------------------|--|
| 1) Control Panel                   | 9) Projection Lens Assembly and Focus Ring |
| 2) Mirror Assembly                 | 10) Remote Control                         |
| 3) Internal Speakers (DP2800 only) | 11) Connector Panel                        |
| 4) Cover Assembly                  | 12) Lamp Selector                          |
| 5) Top Air Intake Filter           | 13) Lamp Chamber Latch                     |
| 6) Recessed Carrying Handle        | 14) Power Cord Receptacle                  |
| 7) Front Air Intake Filters        | 15) Power Switch                           |
| 8) Cyclops Lens                    | 16) Circuit Breaker Reset Button           |

# PROXIMA® Desktop Projector™

Multimedia LCD Projectors  
(Models DP2800 and DP2700)

## Proxima Desktop Projector Models

This manual contains information for setting up and using the Proxima® Desktop Projector™ 2800 and the Proxima® Desktop Projector™ 2700. These projectors are referenced throughout the manual as follows:

- *Desktop Projector*
- *projector*
- *Desktop Projector 2800*
- *Desktop Projector 2700*
- *Model DP2800*
- *Model DP2700*

Both the Desktop Projector 2800 and the Desktop Projector 2700 have many aspects in common. Unless otherwise indicated, the information contained within this manual is common to both models. Where controls, operations, or other aspects differ between models, an icon indicating the model number appears next to the material that applies to it. The model number will also be called out in the body of the text.



**Warranty**

Proxima Corporation warrants that the Proxima® Desktop Projector™ product manufactured by Proxima is free from defects in materials and workmanship under normal use during the Warranty Period. The Warranty Period commences on the day of purchase by the end-user. The Warranty Period is one year. The Desktop Projector lamps are not covered by this Warranty.

The end-user's sales receipt or invoice showing the date of purchase of the product and the name of the Reseller is proof of date of purchase. The Warranty extends only to the original purchaser and is not transferable.

During the Warranty Period, Proxima will, at no additional charge, repair or replace defective parts or at the option of Proxima, replace the entire unit.

This limited Warranty does not extend to any Proxima product that has been damaged or been rendered defective (a) as a result of accident, misuse or other abuse; (b) by the use of parts not manufactured or sold by Proxima; (c) by modification of the product; or (d) as a result of servicing by non-authorized personnel.

**Limitation of Warranties**

The foregoing Warranty is expressly in lieu of any other expressed or implied warranties, including, without limitation, warranties of merchantability or fitness for a particular purpose. To the extent not prohibited by law, all statutory warranties are hereby waived and excluded from this Warranty. Proxima expressly disclaims all warranties not stated in this Limited Warranty.

**FCC Statement**

Warning: This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with limits for a Class "A" computing device pursuant to Subpart B of Part 15 of the FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user, at his own expense, will be required to take whatever measures may be necessary to correct the interference.

**Trademarks, Patents, and Copyright**

Proxima and Cyclops are registered trademarks of Proxima Corporation. Desktop Projector and trade dress are trademarks of Proxima Corporation. IBM is a registered trademark of International Business Machines Corporation. Macintosh is a registered trademark of Apple Computer, Inc. Other trademarks are the property of their respective owners. U.S. patent numbers 5,153,568, 5,225,875 and 5,264,835 apply to the Desktop Projector 2700 and Desktop Projector 2800. U.S. patent number 5,276,436 applies to the Desktop Projector 2800. Other U.S. and foreign patents are pending.

© Copyright 1994 Proxima Corporation. All rights reserved. Specifications are subject to change without notice.


## Contents

---

<b>Chapter 1</b>	Desktop Projector Family .....	1-2
Introducing the	Cyclops Interactive Pointer System .....	1-2
Proxima®	What's in the Box? .....	1-3
Desktop		
Projector™		
<b>Chapter 2</b>	Your Proxima Desktop Projector .....	2-1
Detailed Setup	Getting Started .....	2-2
	Opening the Projector .....	2-2
	Closing the Projector .....	2-7
	Transporting the Projector .....	2-8
	Connecting the Desktop Projector .....	2-9
	COMPUTER .....	2-10
	RS-232 .....	2-13
	VIDEO IN .....	2-14
	S-VHS .....	2-15
	COMPUTER AUDIO IN .....	2-16
	AUDIO IN .....	2-16
	Connecting a Monaural Source .....	2-17
	Connecting a Microphone .....	2-18
	AUDIO OUT .....	2-18
	Powering Up .....	2-21
	Applying Power to the Projector .....	2-21
	Turning On/Off the Lamp .....	2-23
	Projecting the Image .....	2-24
	Image Size .....	2-24
	Focusing .....	2-25
	Keystoning .....	2-26

## **Chapter 3**

### **Using the Desktop Projector**

The Control Panel .....	3-1
The Control Panel Keys .....	3-2
Arrow Keys .....	3-2
BRIGHTNESS Keys .....	3-2
LAMP Key .....	3-2
MENU/  (CYCLOPS) Key .....	3-3
SYNC Keys .....	3-4
VIDEO Key .....	3-4
VOLUME Keys .....	3-4
The Menu Settings .....	3-5
Selecting and Changing Settings .....	3-5
Saving Changes .....	3-5
Levels Menu .....	3-6
BRIGHTNESS .....	3-6
SYNC .....	3-7
VOLUME .....	3-7
RGB Controls: RED, GREEN & BLUE .....	3-7
TINT .....	3-7
CONTRAST .....	3-8
Setup Menu .....	3-8
SOURCE .....	3-9
IMAGE .....	3-9
COLORS .....	3-10
PROJECTION .....	3-10
FREQUENCY .....	3-11
LANGUAGE .....	3-11
STORE? .....	3-11
SETTINGS .....	3-12
Warning and Alert Lights .....	3-13
OVERTEMP Warning Light .....	3-13
REPLACE LAMP Alert Light .....	3-14
Remote Control .....	3-15
MUTE Key .....	3-16
TEXT Key .....	3-16
REV, PAUSE and FWD Keys .....	3-16

<b>Chapter 4</b>	Cleaning .....	4-2
<b>Maintenance</b>	Projection Lens or Mirror .....	4-2
	General Maintenance .....	4-3
	Switching Lamps .....	4-3
	Replacing Lamps .....	4-4
	Changing Air Filters .....	4-7
	Changing the Remote Control's Batteries.....	4-12
	Temperature Extremes .....	4-12
<b>Chapter 5</b>	Troubleshooting Chart .....	5-1
<b>Troubleshooting</b>	Where to Get Help .....	5-4

## **Appendix A**

Specifications

## **Appendix B**

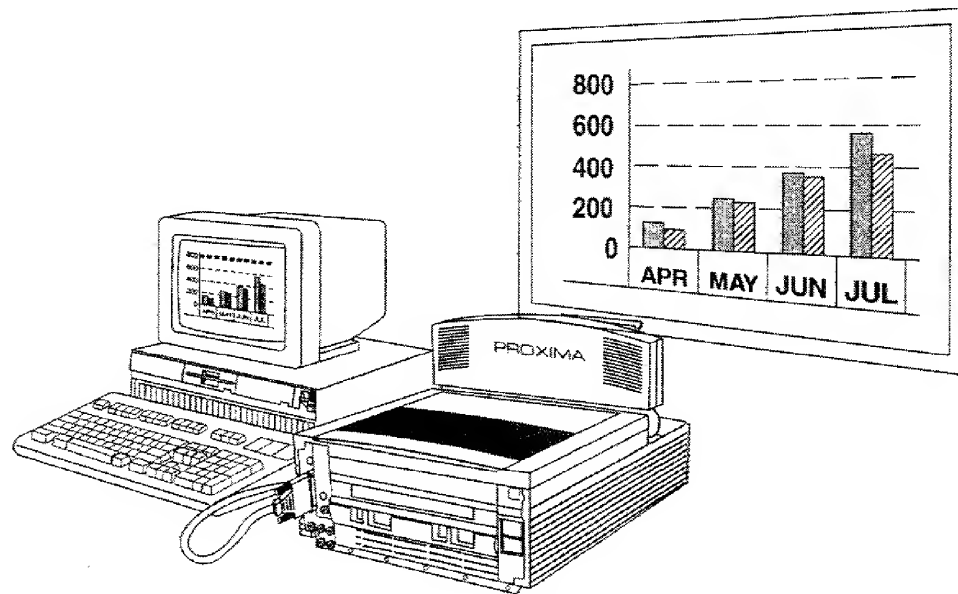
Accessories & Replacement Parts

## **Index**

## Chapter 1

### Introducing the Proxima® Desktop Projector™

The Proxima Desktop Projector family consists of portable, color data and video LCD desktop projection products that make sharing data and presenting information as easy as connecting your computer to your monitor.



**Figure 1**  
The Proxima Desktop Projector in use

### **Desktop Projector Family**

The Desktop Projector family includes the following products:

- The Desktop Projector 2800 is a video-ready, active-matrix multimedia projector for all desktop projection applications.
- The Desktop Projector 2700 is an active-matrix, high-performance color projector with optional video capabilities.
- The Desktop Projector 2300 is an affordable high quality color projector for all data desktop projection applications.

This manual covers only the Model DP2800 and the Model DP2700.

### **Cyclops Interactive Pointer System**

All Proxima Desktop Projectors come Cyclops-ready. Cyclops is an interactive pointer system that functions like a cordless mouse and lets you control your computer and software from the projection screen.



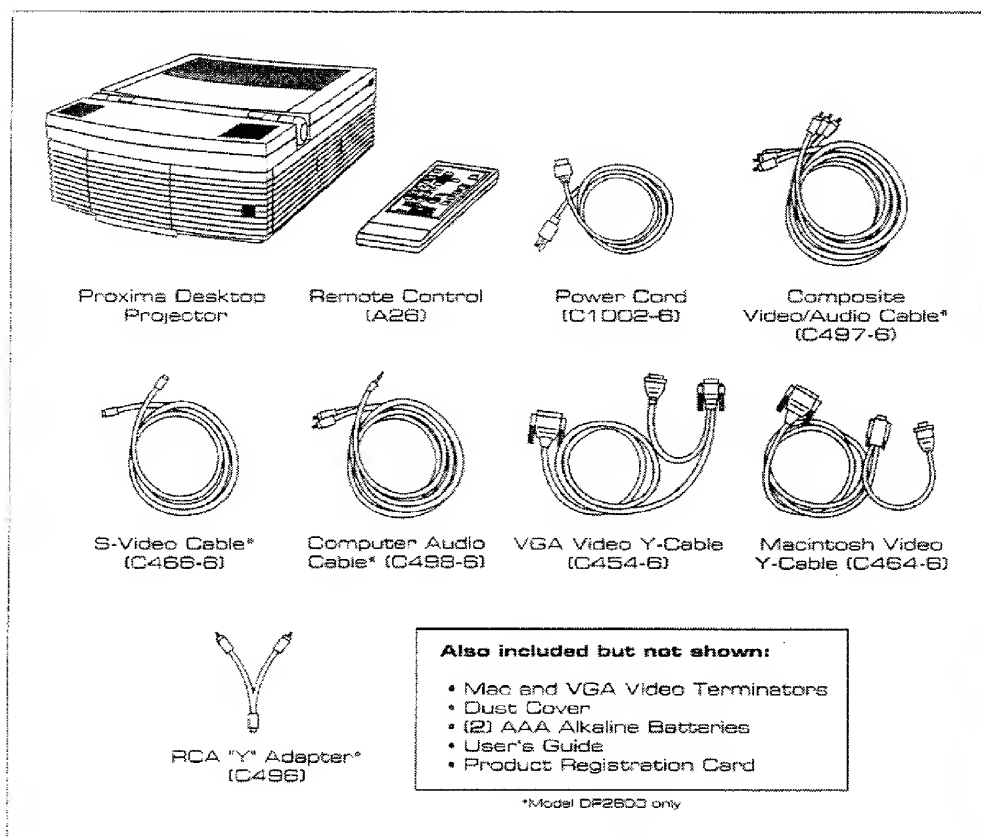
**Note:** You cannot use Cyclops and Proxima's Presentation Control Software at the same time. To disable Cyclops and use the software, hold the MENU key on the Control Panel down when you turn the projector power on. *This procedure will not work with the remote control.* To re-enable Cyclops, turn the projector off and then power it up again.

## What's in the Box?

After you've opened the box and removed the Desktop Projector and shrink-wrapped accessory packs, make sure you have all the items shown in Figure 2.



**CAUTION!** The Desktop Projector should be treated like any other precision optical instrument. Handle it carefully.



**Figure 2**  
Items included with the Desktop Projector

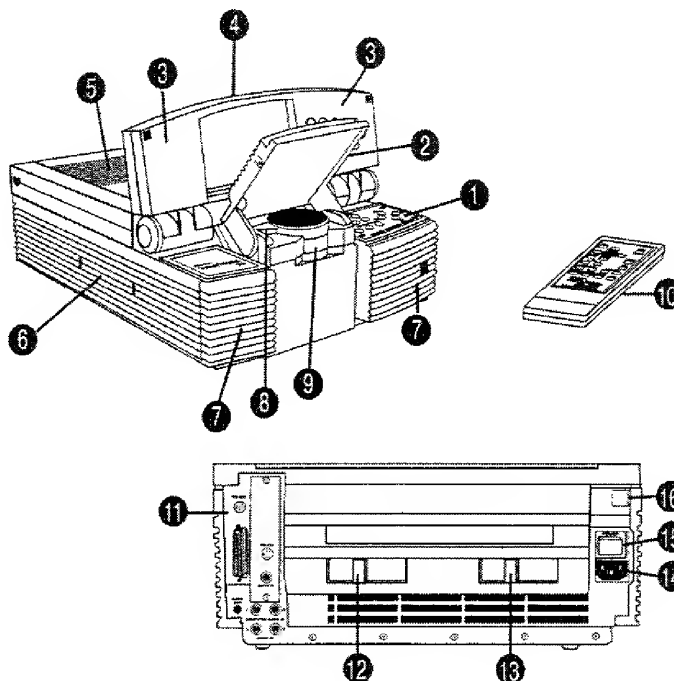
The international version has three extra power cords for Europe (part number C1003-6), Great Britain (part number C1011-6), and Italy (part number C1012-6).

## Chapter 2

### Detailed Setup

#### Your Proxima Desktop Projector

Before you begin, examine the components of the projector.



**Figure 3**  
The Proxima Desktop Projector and Remote Control

- |                              |   |
|------------------------------|---|
| (1) Control Panel            | (9) Projection Lens Assembly and Focus Ring |
| (2) Mirror Assembly          | (10) Remote Control                         |
| (3) Internal Speakers*       | (11) Connector Panel                        |
| (4) Cover Assembly           | (12) Lamp Selector                          |
| (5) Top Air Intake Filter    | (13) Lamp Chamber Latch                     |
| (6) Recessed Handle          | (14) Power Cord Receptacle                  |
| (7) Front Air Intake Filters | (15) AC Power Switch                        |
| (8) Cyclops Lens             | (16) Circuit Breaker Reset Button           |

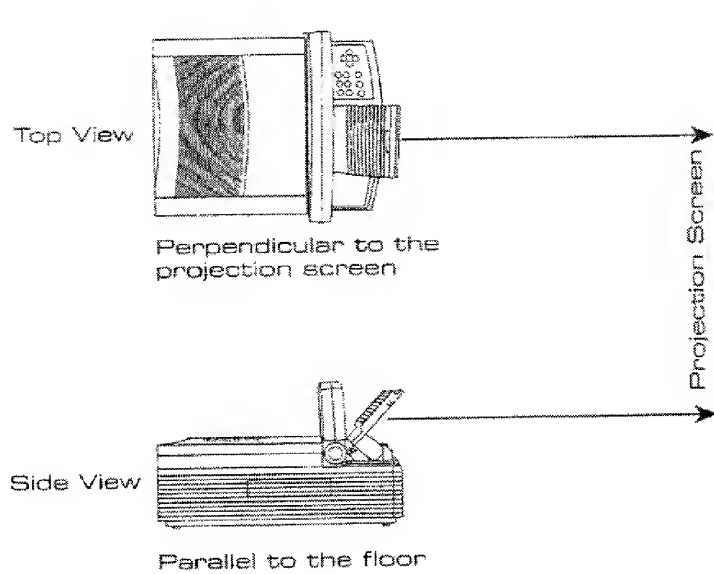
\* Model DP2800 only



## Getting Started

### Opening the Projector

1. Place the projector on a solid, flat surface. The projector should be located at a right angle (perpendicular) to the projection screen and parallel to the floor.

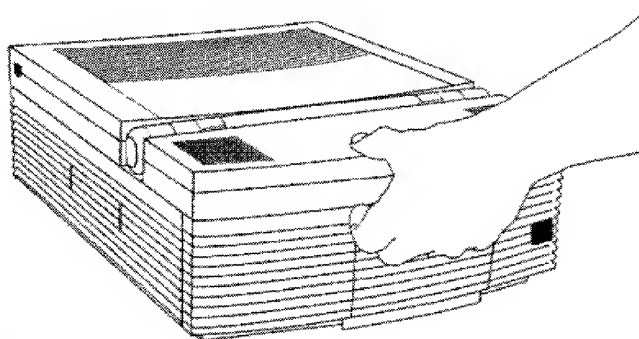


**Figure 4**  
Positioning the Desktop Projector



**Note:** If you're using a media cart, make sure the wheels are locked to prevent it from moving.

2. Grasp the front edge of the cover assembly at the upper front of the projector. Raise it until it reaches the first stop. You can also use the projector in the fully open position by raising the cover assembly to the second stop.

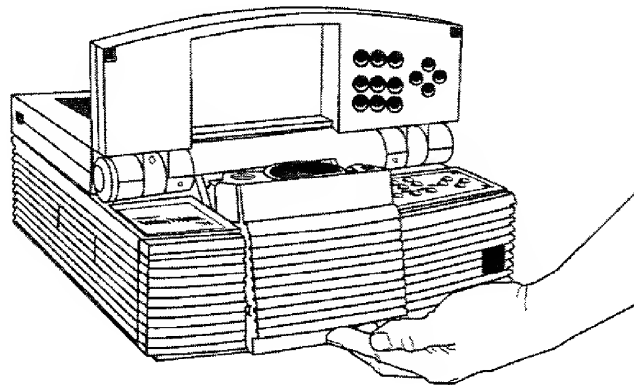


**Figure 5**  
Opening the cover assembly

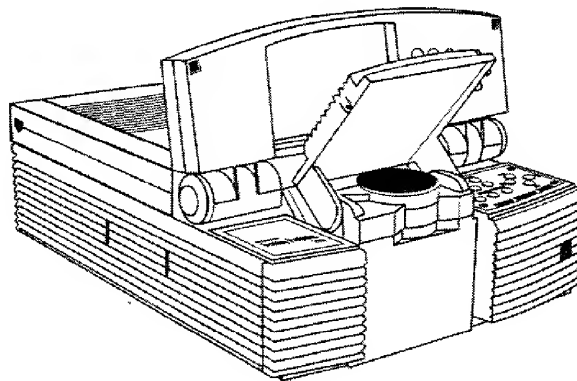


**CAUTION!** The Desktop Projector's cover and projection mirror assemblies have been designed to limit over-extension. Applying excessive pressure can damage the projector.

3. Place your fingers beneath the mirror assembly (located at the lower center of the front panel) and raise it into place until it reaches a  $45^\circ$  angle (approximately) relative to the top of the lens assembly.



**Figure 6**  
Raising the mirror assembly



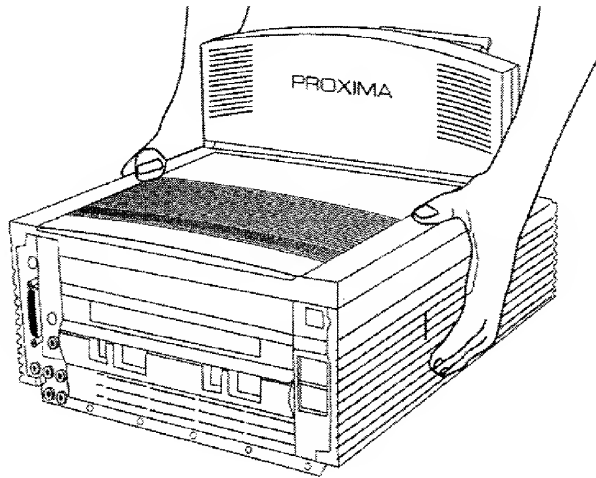
**Figure 7**  
The Desktop Projector in the open position

Your projected image should fill the projection screen. If you want to raise or lower the projected image, simply adjust the mirror assembly to the appropriate angle.



**CAUTION!** DO NOT attempt to lift or move the projector by using the assembly cover or projection mirror as a handle. IT IS STRONGLY RECOMMENDED THAT YOU CLOSE THE PROJECTOR COMPLETELY BEFORE MOVING IT!

If you must move the projector while it is open, grasp it securely at the sides by the lower part of the housing to support the weight of the unit.



**Figure 8**  
Moving the projector when open

### *Using an AV Tripod*

Located on the bottom of the Desktop Projector is a connector for use with a tripod. Use only a heavy-duty, industrial audio-visual tripod that can support at least 20 pounds.

To attach the tripod to the projector:

1. Grasp the projector by the handle and stand it on its side.
2. Holding the tripod sideways, screw its threaded camera mount into the connector on the bottom of the projector.
3. Extend and lock the tripod's legs.
4. Grasp the projector by its handle and place your other hand under the unit (the side opposite the handle). Lift and turn the projector into its normal operating position on top of the tripod.



**CAUTION!** Be extremely careful when using the projector with a tripod. The following precautions should be observed:

- You can mount the projector on a tripod by yourself. However, it is easier to do this if someone else is holding the projector while you connect the mount.
- Make sure that the tripod legs and camera mount are securely locked.
- Do not place the tripod and projector in any pathways that you or your audience will be using during the presentation.
- Make sure that all cables are secured and out of the way. In particular, be extremely careful of the power cord and any extension cords.

## Closing the Projector

To close the projector, reverse the opening procedures.

1. Rotate the projection mirror assembly forward and down until it is in the fully closed position.
2. Rotate the hinged cover assembly forward and down until it is in the fully closed position.



**CAUTION!** Gently close the mirror and hinged cover assembly. Forcing them to snap into place may damage the mirror assembly. Close the assemblies in the proper order. Do not attempt to close the projector by only moving the cover assembly.

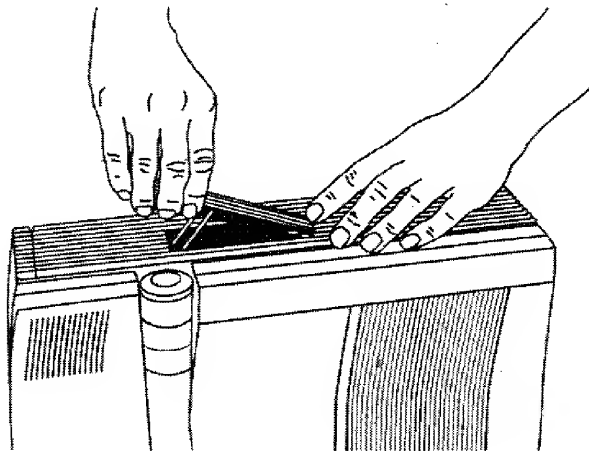
## Transporting the Projector



**CAUTION!** Do not move or transport the Desktop Projector without securely closing the projector and disconnecting all of the cables.

The Desktop Projector has a recessed carrying handle located in one of the side panels.

1. Push in on either end of the handle. Pull the handle up.
2. Release the handle. The spring-loaded mechanism will retract it back into the body of the projector.



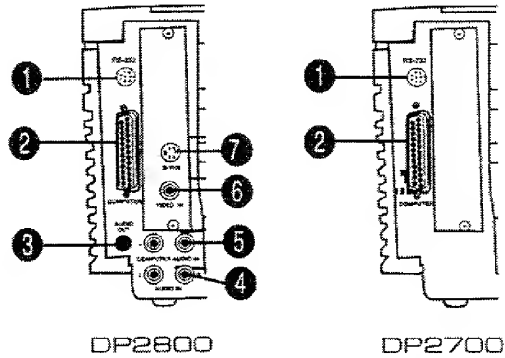
**Figure 9**  
Accessing the handle



**Note:** The projector has protective feet on the side opposite the handle as well as on the bottom.

## Connecting the Desktop Projector

Take a moment to look at the projector's rear connector panel.



**Figure 10**  
The Connector Panels

	Connector(s)	Description	Model(s)
1	RS-232	For using optional Cyclops system or Presentation Control Software	DP2800 DP2700
2	COMPUTER	Connects computer video to the projector	DP2800 DP2700
3	AUDIO OUT	Stereo output to external powered speakers or external sound system	DP2800
4	AUDIO IN	Left and right inputs from VCR or other audio source, or amplified or wireless microphone	DP2800
5	COMPUTER AUDIO IN	Left and right inputs from computer audio source, or amplified or wireless microphone	DP2800
6	VIDEO IN	NTSC/PAL/SECAM input from VCRs, laserdisc players, and camcorders	DP2800 DP2700*
7	S-VHS	Input from S-VHS or S-video source	DP2800 DP2700*

\* Requires optional video adapter (part number A195)

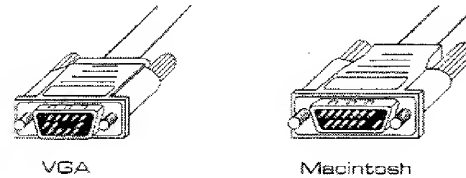


## COMPUTER

The video Y-cable allows you to connect your computer to both the Desktop Projector and to a separate computer monitor so that you can view computer video output on the monitor and projection screen simultaneously.

### *Desktop Computers*

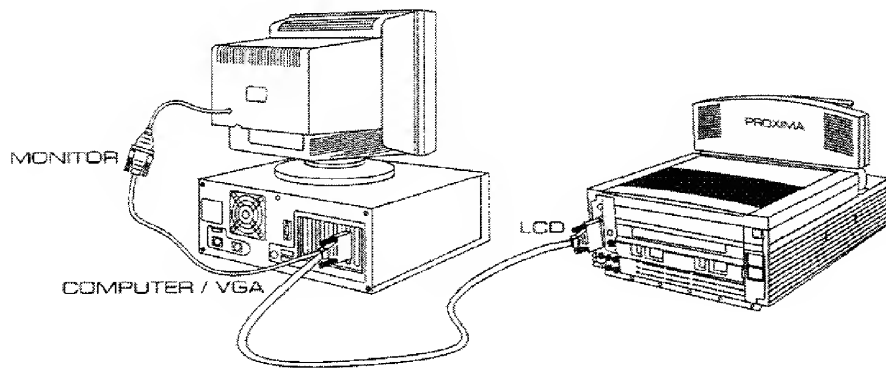
If you are using a desktop computer, regardless of whether it's an IBM compatible or a Macintosh system, the sequence for connecting it to your Desktop Projector is exactly the same. Use the Y-cable appropriate to your system. For IBM compatibles, use part number C454-6; for Macintosh systems, use part number C464-6.



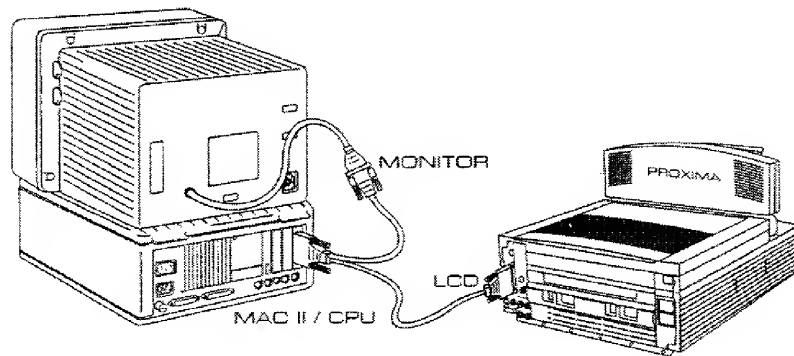
**Figure 11**  
VGA and Macintosh connectors

1. Turn off all power to your computer, its monitor, and the Desktop Projector.
2. Unplug your monitor cable from your computer's video monitor port and attach the cable to the short end of the Y-cable (marked MONITOR).
3. Locate the Y-cable's common end, marked CPU/MAC II for Macintosh systems and COMPUTER/VGA for IBM-compatibles. Plug it into the computer's monitor port.

4. Insert the Y-cable's large, 25-pin connector (marked LCD) into the Desktop Projector's COMPUTER port.



**Figure 12**  
VGA connections



**Figure 13**  
Macintosh connections



**Note:** If you want to use your desktop computer without a monitor, connect one of the supplied video terminators to the short end of the Y-cable (marked MONITOR). Use the appropriate terminator for your system. For IBM compatibles, use part number C936; for Macintosh systems, use part number C935.

#### *Notebooks/Laptops*

Use the Y-cable appropriate to your system. For IBM compatibles, use part number C454-6; for Macintosh systems, use part number C464-6.

1. Turn off all power to your notebook or laptop computer and the Desktop Projector.
2. Locate the Y-cable's common end, marked CPU/MAC II for Macintosh systems or COMPUTER/VGA for IBM compatibles. Plug it into the computer's monitor port.
3. Insert the Y-cable's large, 25-pin connector (marked LCD) into the Desktop Projector's COMPUTER port.
4. Attach the appropriate video terminator to the short end of the Y-cable (marked MONITOR). For IBM compatibles, use part number C936; for Macintosh systems, use part number C935.



**Note:** If you don't get an image (i.e., your Desktop Projector is unable to project an image at the same time that your laptop computer displays a screen image), refer to your computer's reference materials for information on how to switch between the internal screen and the video port.



**Note:** If you're using your notebook or laptop computer with an external monitor, follow the procedure described in the previous section titled *Desktop Computers*.

### *Special Configurations*

If your computer has an internal monitor but does not have external video capabilities (i.e., Macintosh SEs and certain PowerBooks), you will need a video adapter card in order to attach the Desktop Projector. Setup for a third-party adapter is identical to the procedures outlined in the previous section titled *Desktop Computers*. Contact your dealer, Proxima Customer Service, or a third-party supplier for more information regarding video adapters.

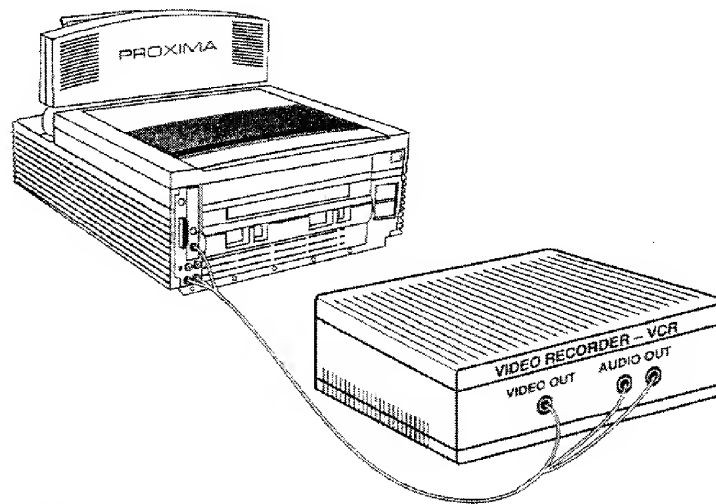
### RS-232

The RS-232 port allows you to use the optional Cyclops interactive pointer system or the Proxima Presentation Control Software. Instructions for connecting the appropriate serial or ADB cables are included with each of these products.

## VIDEO IN



The Desktop Projector 2800 can project video from NTSC, PAL or SECAM sources (i.e., VCRs, laserdisc players and camcorders).



**Figure 14**  
The Desktop Projector connected to a video source

To connect an NTSC, PAL, or SECAM source to your Desktop Projector:

1. The composite audio/video cable (part number C497-6) is made up of 3 cables with yellow, red, and white RCA plugs. Insert the yellow RCA plug into the circular connector on your camcorder, laserdisc player, or VCR marked VIDEO OUT, TO MONITOR, or something similar.
2. Insert the other yellow RCA plug into the projector's VIDEO IN port.

The red and white cables are for audio input from the video source. Refer to the *AUDIO IN* section later in this chapter.



With the installation of an optional video adapter (part number A195), the Model DP2700 can also display video images from an NTSC, PAL or SECAM source. Refer to *Appendix B: Accessories & Replacement Parts* for ordering information.

### S-VHS



The Desktop Projector 2800 can project video from an S-VHS or S-Video source.

1. Connect one end of the S-Video (Y-C) cable (part number C466-6) to your video source connector marked VIDEO OUT, TO MONITOR, or something similar. The cable has identical round 4-pin connectors on either end.
2. Connect the other end of the cable to the Desktop Projector's input connector marked S-VHS.



With the installation of an optional video adapter (part number A195), the Model DP2700 can also display video images from an S-VHS or S-Video source. Refer to *Appendix B: Accessories & Replacement Parts* for ordering information.

## COMPUTER AUDIO IN



The COMPUTER AUDIO IN connector allows the Model DP2800 to receive audio input from a computer or a microphone.

### *Connecting Your Computer's Audio*

1. Insert the mini jack end of the computer audio cable (part number C498-6) into the AUDIO OUT connector of a Macintosh or the sound card of an IBM compatible.
2. Insert the RCA jacks at the other end of the computer audio cable into the projector's left and right COMPUTER AUDIO IN connectors.

## AUDIO IN



The Model DP2800 has left and right stereo connectors for audio input from VCRs, laserdisc players, and other video equipment.

### *Connecting a Video Audio Source*

The composite audio/video cable (part number C497-6) is made up of 3 cables with yellow, red, and white RCA plugs.

1. Insert a white RCA plug into your video source's left AUDIO OUT connector. Insert the other white RCA plug into the projector's left AUDIO IN port.

2. Insert a red RCA plug into your video source's right AUDIO OUT connector. Insert the other red RCA plug into the projector's right AUDIO IN port.



**Note:** Although both COMPUTER AUDIO IN and AUDIO IN may be connected simultaneously, only one is active.

- If computer video is selected, COMPUTER AUDIO IN is active.
- If NTSC/PAL/SECAM/S-VHS video is being viewed, AUDIO IN is active.

### Connecting a Monaural Source



If you have a monaural source that you want to play through the Desktop Projector's left and right speakers, use the RCA "Y" adapter cable (part number C496) to connect the source to the projector's left and right AUDIO IN connectors. If you are using computer audio, connect the source to the projector's Left and Right COMPUTER AUDIO IN connectors.



## Connecting a Microphone



When you need to address a larger audience while projecting an NTSC, PAL, SECAM or S-VHS video image, plug an amplified or wireless microphone equipped with a line level output (maximum level of 1 volt, peak-to-peak) into the Left and Right AUDIO IN connectors. The microphone will work when an NTSC, PAL, SECAM or S-VHS video image is projected. If you wish to address a larger audience while projecting a computer image, connect the source to the projector's Left and Right COMPUTER AUDIO IN connectors.

If your microphone's amplifier has only one output, use the RCA "Y" adapter cable (part number C496) and a standard RCA cable to connect it to both of the projector's AUDIO IN or COMPUTER AUDIO IN connectors.

## AUDIO OUT



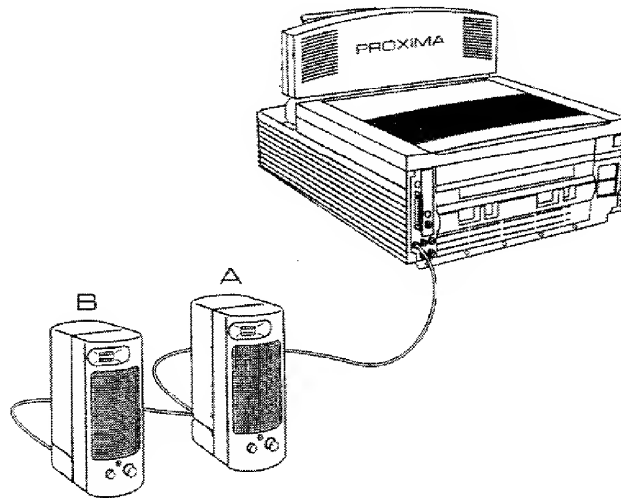
The Model DP2800 contains an internal stereo system consisting of an amplifier and two speakers. Although this system provides high quality stereo output, a multimedia presentation may require connecting the projector to external powered speakers or an external sound system.

### *External Speakers*

When connecting external speakers, use the optional Proxima Powered Loudspeaker System (part number A55) or a similar system. References in the following procedure are to Figure 15.

To connect your Desktop Projector to external powered speakers:

1. Insert the mini plug of the stereo cable (supplied with your powered speakers) into the projector's AUDIO OUT port.
2. Insert the other end of the cable into speaker A.
3. Connect speaker A to speaker B using the cables supplied with the speaker system.

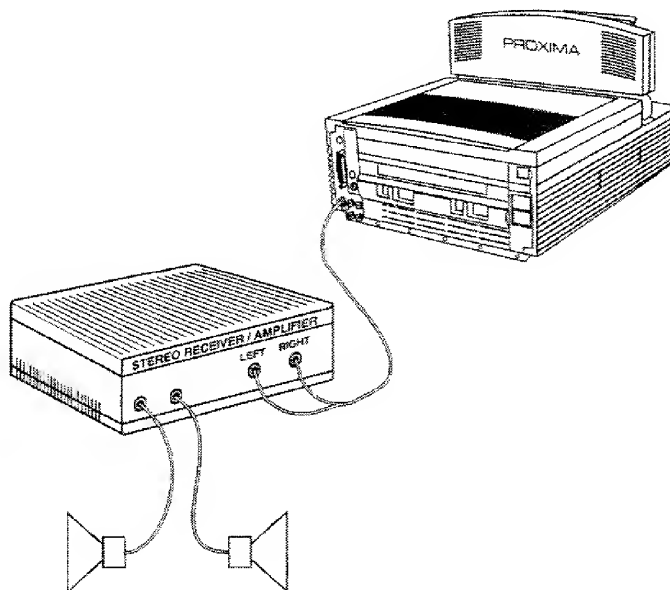


**Figure 15**  
Connecting the Desktop Projector to external speakers

### *External Stereo System*

To connect your Desktop Projector to an external stereo system:

1. Using the computer audio cable (part number C498-6), insert the mini jack end into the Model DP2800's AUDIO OUT port.
2. Insert the RCA connectors at the other end of the cable into the external amplifier's left and right AUDIO IN ports.

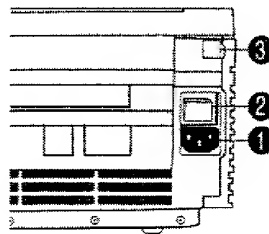


**Figure 16**  
Connecting the Desktop Projector to an external stereo system

**Powering Up** Your Desktop Projector and external monitor (if you are using one) must be powered-up *before* turning on your computer, so that your computer properly senses each display during its boot-up sequence.

### Applying Power to the Projector

On the rear connector panel of the projector, you'll find a power cord receptacle and an AC POWER switch.



**Figure 17**  
Power receptacle (1), AC POWER switch (2), and circuit breaker reset switch (3)

To power up the projector:

1. Plug the power cord into the Desktop Projector's power receptacle at the rear of the unit.

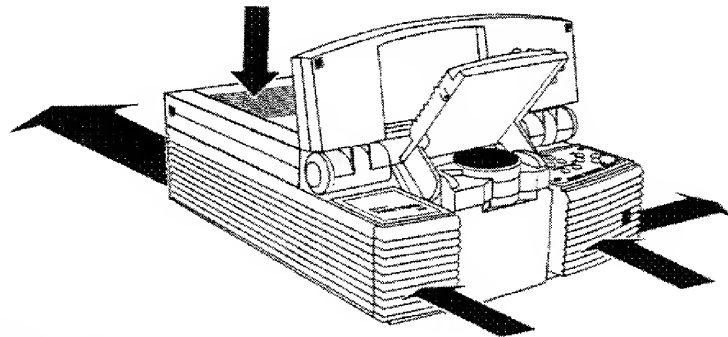


**CAUTION!** Plug the AC power cord into the Desktop Projector *BEFORE* connecting it to an electrical outlet. If you plug the power cord into the wall first, it might damage the projector.

2. Connect the power cord to a properly-grounded wall outlet.
3. Move the AC POWER switch to the ON position. The projector's fan will begin to run. If you do not hear the fan, refer to *Chapter 5, Troubleshooting*.
4. Turn on your monitor and computer.



**CAUTION!** Locate the air intake and exhaust grills on the top cover and to the left and right sides of the projection mirror assembly, and the exhaust grills on the rear panel and side of the projector. Never operate the projector if these grills are clogged or obstructed, or if the electric fans are not running.



**Figure 18**  
Allow for proper air flow!



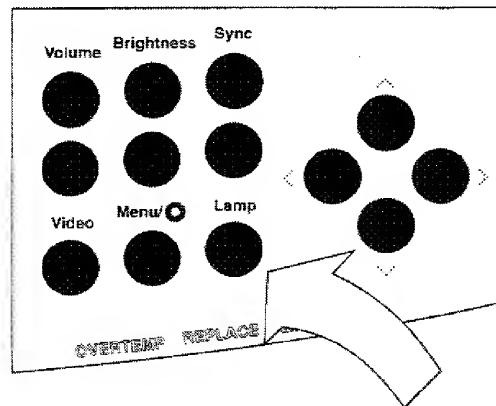
**CAUTION!** The lamp chamber gets very hot during operation. In particular, the ceramic socket at the lamp's base can get extremely hot! Use appropriate care when opening the lamp chamber or changing lamps. Make sure that the lamp chamber and lamp have cooled for at least 6 minutes with the fan running. To do so, press the LAMP button to turn off the lamp and allow the fan to operate for several minutes.



**Note:** If you turn the Desktop Projector off while the rest of your computer system is running, your external monitor will go blank. This is normal. Just turn the Desktop Projector on again and your monitor display will return.

### Turning On/Off the Lamp

When you first turn on the projector, the lamp will be on. To turn the Desktop Projector's lamp off, press the LAMP key on the Control Panel or remote control. Pressing the LAMP key again will turn the lamp on. The lamp turns on slowly to prolong lamp life.



**Figure 19**  
The LAMP key



**Note:** Turning the lamp off does not cut power to the projector. The fans will still operate. You must move the AC POWER switch to the OFF position to completely power down the projector.

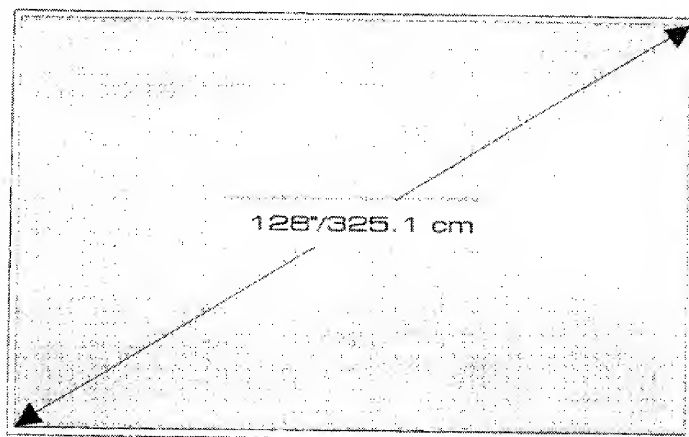
## Projecting the Image

Your next step is to adjust the projected image for size and clarity.

### Image Size

The size of the projected image varies according to the distance from the Desktop Projector to the projection screen. The following table shows the projected image size (measured diagonally) based on the distance from the projector to the screen.

Distance from Screen	Diagonal Image Size
4 ft/1.2 m	35"/88.9 cm
6 ft/1.8 m	53.5"/135.9 cm
8 ft/2.4 m	72"/182.9 cm
10 ft/3.0 m	90.5"/229.9 cm
12 ft/3.6 m	109.7"/278.6 cm
14 ft/4.3 m	128"/325.1 cm



**Figure 20**

Diagonal measurement of projected image when Desktop Projector is 14' (4.3 m) from projection screen

$$\text{IMAGE HEIGHT} = \text{DIAGONAL} \times 0.6$$

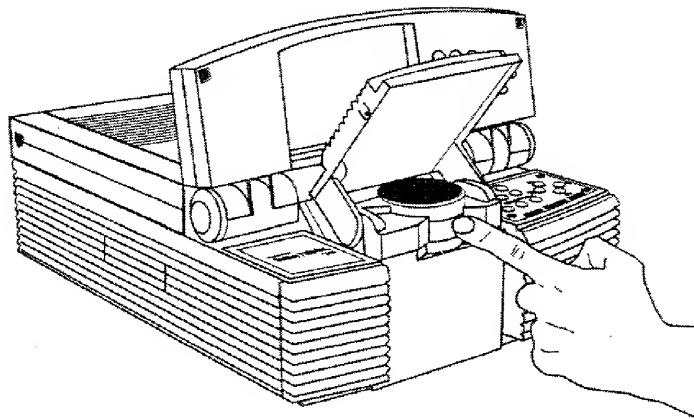
$$\text{IMAGE WIDTH} = \text{DIAGONAL} \times 0.8$$

FOR A 4:3 ASPECT RATIO.

## Focusing

You can use the title screen image that appears when you first start up the projector to make your adjustments.

Using a thumb or fingertip, rotate the focus ring to the right or left for the clearest displayed image.

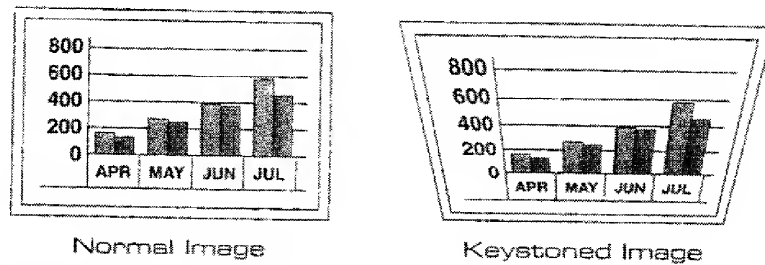


**Figure 21**  
The projector lens focus ring



## Keystoning

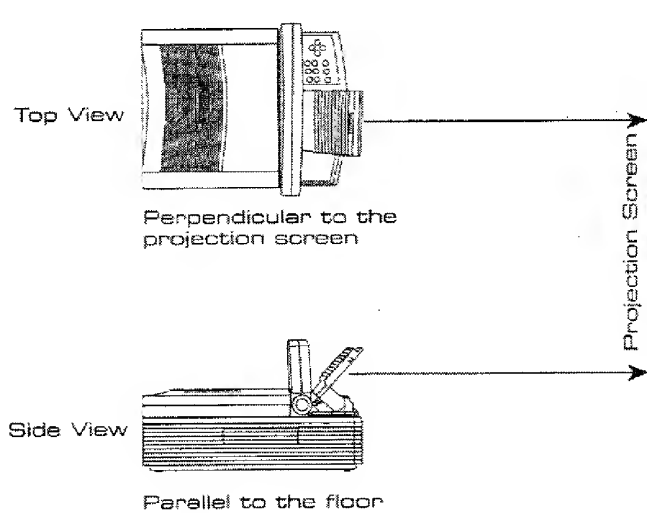
The normal projected image will have a rectangular shape. Keystoning is when the projected image becomes trapezoidal.



**Figure 22**  
Normal vs. keystoned images

Keystoning occurs when the front of the Desktop Projector is not perpendicular to the projection screen (the vertical plane) or when it's not placed parallel to the floor (the horizontal plane). Keystoning also occurs when the Desktop Projector is tilted sideways.

To correct for keystoneing, always make sure that the projector is at a right angle to the screen in the horizontal plane. The projector is properly aligned if the top and bottom of the projected image are equal in length and parallel to the floor.



**Figure 23**  
Positioning the Desktop Projector

In order to allow you to project images high enough for the entire audience to view, the Desktop Projector has been designed to minimize this effect. A 10.5° correction for keystoneing is built into the projector.

- Correction is +ve (upward) tilt.
- Doesn't work with downward projection.

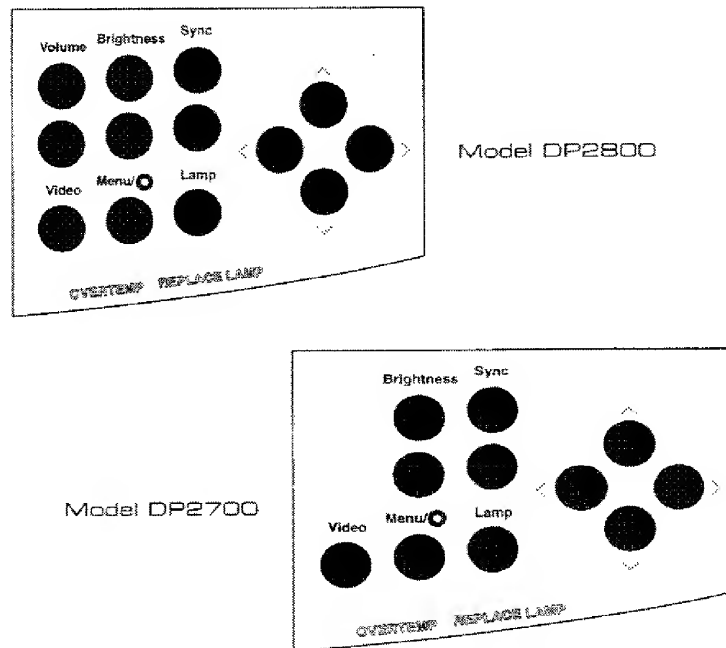
## Chapter 3

### Using the Desktop Projector

This chapter provides detailed information on the Desktop Projector settings, the Control Panel functions, the Menu Windows, and the warning indicators.

#### The Control Panel

The following figure shows the control panel configurations for the Model DP2800 and the Model DP2700.



**Figure 24**  
Model DP2800 and Model DP2700 control panels

## **The Control Panel Keys**

### Arrow Keys

The four arrow keys allow you to:

- Make small adjustments to the projected image's position on the screen. Pressing an arrow key shifts the projected image in the direction indicated by the arrow, or
- Access and modify settings within the Menu windows.

For more information, please refer to the section titled *The Menu Settings* later in this chapter.

### BRIGHTNESS Keys

The BRIGHTNESS keys increase and decrease the intensity level of the projected image. Press the top key to increase brightness and the bottom key to decrease it.

### LAMP Key

The LAMP key toggles the projection lamp on and off.

- If you turn the lamp off but leave the projector on, the fan will continue to run.
- You can turn the projector off without allowing the fan to cool down the unit. However, the projector will take a little longer to cool.

## MENU/ (CYCLOPS) Key

This key allows you to access and modify the current Desktop Projector settings in the Menu Window, which appears in the lower portion of the displayed image. This key also allows you to initiate the light measurement sequence for calibrating the optional Cyclops interactive pointer system (part number A2060) and to disable Cyclops when you wish to use Proxima's Presentation Control Software.

1. Press the MENU key to display the Levels Menu.
2. Press the MENU key again to display the Setup Menu.
3. Exit the Menu Window by pressing the MENU key a third time.

For more information, please refer to the section titled *The Menu Settings* later in this chapter.



**Note:** Pressing the MENU key twice in rapid succession will allow you to:

- Access the Menu Window and go directly to the Setup Menu, or
- Exit the Menu Window from the Levels Menu.



**Note:** Holding the MENU key down for several seconds initiates the Cyclops light measurement sequence. For more information, please refer to your *Cyclops User's Guide*.

A2060



**Note:** You cannot use Cyclops and Proxima's Presentation Control Software at the same time. To disable Cyclops and use the software, hold the MENU key on the Control Panel down when you turn the projector power on. *This procedure will not work with the remote control.* To re-enable Cyclops, turn the projector off and then power it up again.

### SYNC Keys

The SYNC keys are used to compensate for fine variations in the timing of a computer's video signal. Sync is only used with computer video. Adjust this setting if you see uneven horizontal features, streaks or shimmering in a graphics image. Press the upper or lower SYNC key until the image stabilizes.

### VIDEO Key



The VIDEO key on the Model DP2800 is used to switch between computer video input, NTSC/PAL/SECAM video input, or S-VHS input.



**Note:** The VIDEO key on the Model DP2700 is operational only if the optional video adapter (part number A195) is installed.

### VOLUME Keys



The VOLUME keys on the Control Panel are used to adjust the audio level of the Model DP2800's internal speakers. Press the Up or Down key to increase or decrease the speakers' audio level.

### **The Menu Settings**

The Menu Window appears in the lower portion of the projected image, displaying the currently selected settings for the Desktop Projector.

1. Press the MENU key on the Control Panel or the remote control to display the Levels Menu.
2. Press the MENU key a second time to display the Setup Menu.

### Selecting and Changing Settings

To move to and change a setting:

1. Use the Right or Left arrow key to move to the setting that you wish to change.
2. Use the Up or Down arrow key to change the setting.



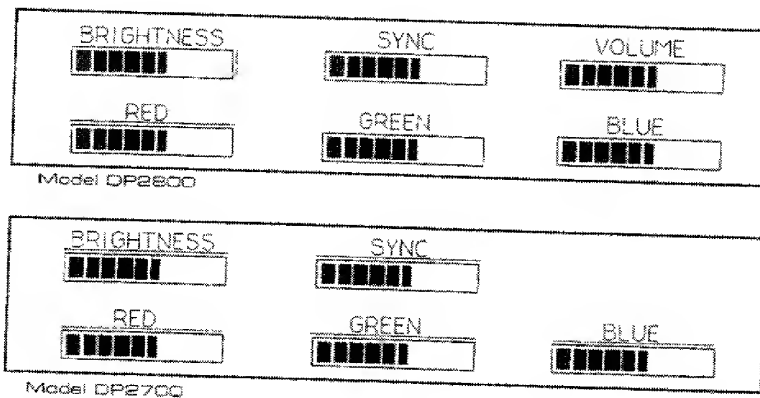
**Note:** The active setting (the one that you can change) is indicated by a red outline.

### Saving Changes

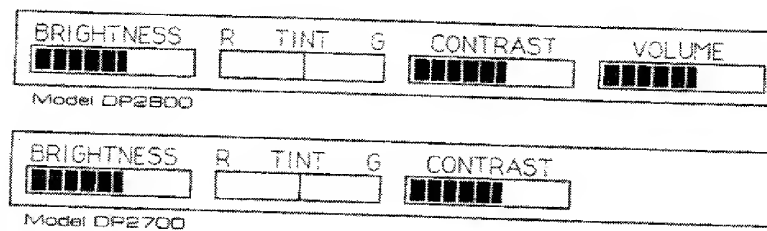
To save any modifications you make to the projector settings:

1. Access the Setup Menu.
2. Use the Right or Left arrow key to move to the STORE setting.
3. Use the Up or Down arrow key to choose the STORING option.

**Levels Menu** Press the MENU key once to display the Levels Menu. From here, you can change the levels for the projector's image and audio controls. The menus vary automatically based on the type of video source displayed.



**Figure 25**  
Levels Menu for computer video



**Figure 26**  
Levels Menu for NTSC/PAL/SECAM and S-VHS video

## BRIGHTNESS

This control is used to increase and decrease the image brightness level. It functions the same way as the BRIGHTNESS key on the Control Panel. Use the Up or Down arrow key to increase or decrease the brightness level.



## SYNC

Adjust this setting if you see uneven horizontal features, streaks or shimmering in a computer video image. Press the Up or Down arrow key until the image stabilizes.

## VOLUME



This selection is used to adjust the volume level if an audio device is connected to the DP2800. Use the Up or Down arrow key to increase or decrease the volume level.



**Note:** For optimal sound control when using an external amplifier (i.e., stereo system), preset the VOLUME setting to 50% (5 bars) before adjusting the volume on the amplifier to a comfortable listening level.

## RGB Controls: RED, GREEN & BLUE

The RED, GREEN and BLUE controls can be used to individually adjust the color signals. Use the Up or Down arrow key to increase or decrease the color signal level. These settings are simultaneously increased or decreased when the BRIGHTNESS control is adjusted.

## TINT



The TINT setting (R and G) adjusts the Red or Green color balance for NTSC/PAL/SECAM video or S-video sources. It has no effect in other video modes. Use the Up or Down arrow key to adjust the color signal balance.

## CONTRAST



The CONTRAST setting is used by the Model DP2800 for NTSC/PAL/SECAM or S-VHS video. Use the Up or Down arrow key to adjust the contrast in the projected image.

CONTRAST is available for the Model DP2700 if it has been upgraded for video.

### Setup Menu

To access the Setup Menu:

- Push the MENU key to access the Levels Menu. Press the MENU key again to access the Setup Menu, or
- Press the MENU key twice to skip the first window and go directly to the Setup Menu.

SOURCE VGA640x480	IMAGE NORMAL	COLORS 226981	PROJECTION FORWARD
FREQUENCY 800	LANGUAGE ENGLISH	STORE? NO	SETTINGS FACTORY

**Figure 27**  
Setup Menu

## SOURCE



SOURCE doubles as both a status and selection box. When you connect a video input, this setting lists the name of the input source detected by the projector.

If the Model DP2800 detects an NTSC source, it automatically defaults to it. The projector cannot tell the difference between PAL or SECAM. When PAL or SECAM is used, the Desktop Projector defaults to PAL. The SOURCE setting allows you to select SECAM as the video source input.

The Desktop Projector selects the best possible value based on the incoming signal. If the image doesn't look right (i.e., wrong colors, image is off screen, image won't sync properly), use the Up or Down arrow key to make an alternate selection.

The Model DP2800 can store a full set of values for each video mode, allowing you to switch back and forth between video inputs and retain your adjusted settings. Upon startup, the projector automatically returns to the last-stored entries for each video mode.

## IMAGE

This control allows you to switch between NORMAL and REVERSE video modes. REVERSE is used primarily for viewing text screens.

## COLORS

This setting allows you to select the color mode most suitable for the type of image you're projecting. Use the Up or Down arrow key to cycle through the choices.

Color Mode	Description	Primary Use
8	Typically results in lower color resolution but brighter image	Text screens
3,375	Best for VGA/Macintosh business graphics or other applications requiring bright, high contrast colors	Computer video
228,981*	Best for complex computer graphics	Graphics, animation or NTSC/PAL/SECAM/S-VHS
2M*	For NTSC, PAL, SECAM or S-VHS video	NTSC/PAL/SECAM/S-VHS

*Not available in EGA/CGA/MDA/Hercules computer video mode.*

## PROJECTION

This function can be used to flip the displayed image, allowing the Desktop Projector to be used with a rear projection screen. PROJECTION can be used in all video modes. Use the Up or Down arrow key to cycle between the FORWARD and REAR options.

## FREQUENCY

This adjustment allows you to synchronize the Desktop Projector with your video source. For example, if your computer has a video card with non-standard signal components (i.e., h-sync or v-sync), the projected image may look jittery, contain bands, or appear out-of-focus. Use the Up or Down arrow key until you find the setting that projects the best image.



**Note:** Always adjust SYNC before changing the FREQUENCY setting.

## LANGUAGE

LANGUAGE allows you to select a particular language set for the Menu Window. Languages displayed include English, German, Italian, French and Spanish. Use the Up or Down arrow key to cycle through the choices.

## STORE?

This function allows you to save the settings currently displayed in both Menus. The saved settings will be used until you define new settings, or return to the factory-configured defaults.

When you store new settings, they overwrite any values previously defined for that particular mode. Stored settings are retained even after the projector is turned off.

## SETTINGS

This function allows you to retrieve the factory-set or stored settings for the current entry displayed in the SOURCE field. Use the Up or Down arrow key to cycle through the options.

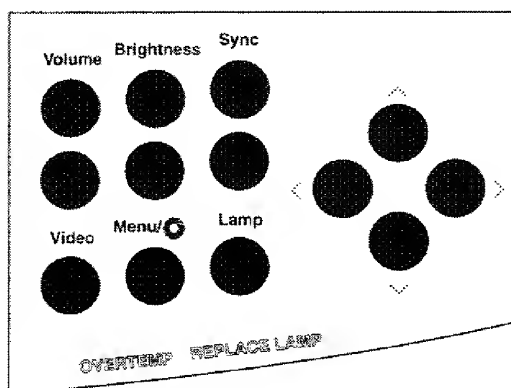
- **FACTORY** – Recalls the default factory-configured values. These will be used until you define new settings.
- **STORED** – Recalls your last saved settings for the current video source.
- **CURRENT** – Indicates that changes have been made, are in use, and have not yet been saved.

### *Factory Defaults*

The first time you turn the Desktop Projector on, factory-set operating values are used. These default settings remain the same over the life of the system. If you change any of these settings, you can recall the factory defaults by accessing the **SETTINGS** function and choosing **FACTORY**.

## Warning and Alert Lights

Warning and alert lights located on the projector's control panel provide you with an indication of the Desktop Projector's operating condition.



**Figure 28**  
Warning lights

### OVERTEMP Warning Light

The OVERTEMP warning will light in the unlikely event that the projector reaches an over-temperature condition. A thermostat will switch off lamp power until the projector cools.



**CAUTION!** DO NOT TURN OFF THE PROJECTOR!  
The power must be left on so the fans can cool down the unit.

If an OVERTEMP condition occurs, perform the following checks while you allow the projector to cool:

- Verify that the room temperature is below 80° F (27° C).
- Check the intake grills and exhaust vents. Clear any obstruction to the air flow.
- Check the filter elements. Clean or replace them if necessary. For more information, please refer to *Chapter 4, Maintenance*.
- Check the rear and side exhaust vents. If the projector has reached an OVERTEMP condition and the fans are working, you should feel a strong rush of hot air from the vents. If the fans are not working, the Desktop Projector needs service.

After the projector returns to its normal operating temperature, the OVERTEMP warning light will go out. In order to turn the lamp back on again, you must press the LAMP key on the Control Panel or remote control.



**Note:** The remote control's LAMP key will not function after an OVERTEMP condition until the lamp is turned on from the Control Panel.

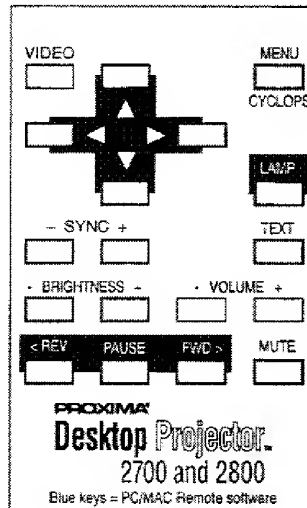
### REPLACE LAMP Alert Light

The REPLACE LAMP alert light will illuminate if the active and/or alternate projection lamps have burned out, or if the lamp selector is not fully engaged.

You can continue your presentation if one lamp has burned out. REPLACE LAMP remains on as a reminder to replace the burned out lamp.



**Remote Control** The remote control contains all the key functions available on the Control Panel.



**Figure 29**  
Remote control unit



**Note:** Unlike the MENU/CYCLOPS key on the Control Panel, the remote control's MENU/CYCLOPS key cannot be used to disable Cyclops.



**Note:** For best results, always aim the remote at the projection screen or at the projector's front edge. Never obstruct the red infrared receiver eye located beneath the Control Panel.

The remote control also provides access to additional functions not available on the Control Panel or through the Menu windows.

*Hold down the Menu/CYCLOPS key  
then turn power on  
see 2700 user guide  
page 6-1*

### MUTE Key



This key is used to momentarily shut down audio output from the Model DP2800. Pressing the MUTE key again toggles the sound back on.

### TEXT Key

The TEXT key toggles between the Graphics mode of 640 x 480 lines and the Text mode of 720 x 400 lines. A DOS text screen is easier to view when in Text mode.

### REV, PAUSE and FWD Keys

These three control keys work with Proxima's MacRemote and PCRemote Presentation Control Software, which can be used to sequence electronic slides. For more information, please refer to the *Presentation Control Software Guide* that comes with your software.

## Chapter 4

### Maintenance

---

There is very little involved with the care and maintenance of your Desktop Projector. However, common sense and periodic maintenance will ensure top performance.

An optional maintenance kit (part number A60) is available that includes the following materials:

- (2) Halogen lamps
- Lens cleaning fluid
- Lens tissue
- Top and front air filters
- Can of compressed air

The lamps, lenses, mirrors, and LCD panel have been carefully aligned at the factory to give you the clearest, brightest image possible. However, physical abuse can cause misalignment or damage to the optical elements. Take appropriate care in use and handling.



**CAUTION!** The Desktop Projector contains sensitive circuitry and optics. Protect it from potential fluid spills.

**Cleaning** From time to time, you'll need to clean the optics on the lens and mirror assembly.

#### Projection Lens or Mirror

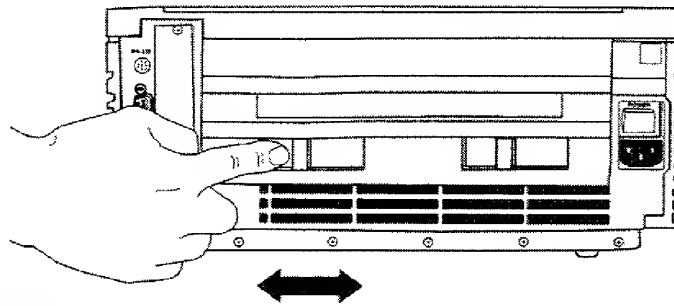
1. Take a piece of lens tissue and form it into a loose swab. Wet it with lens cleaning fluid or alcohol and gently move it over the lens or mirror surface.
2. Take another part of the lens tissue not touched by your bare fingers and repeat the process, going over the lens or mirror in another direction.
3. Repeat steps 1 and 2 until no smudges or particles can be seen when the lens or mirror is illuminated by a strong light. If the lens or mirror is extremely dirty, it may be necessary to use several pieces of lens tissue. Water may be used if alcohol is unavailable.



**CAUTION!** Acetone should NEVER be used because it may remove the paint from the metal lens or mirror mount and leave a residue on the glass surface.

**General  
Maintenance****Switching Lamps**

If your projector lamp burns out during a presentation, the LAMP SELECTOR switch allows you to quickly and easily change to a backup lamp.



**Figure 30**  
The lamp selector

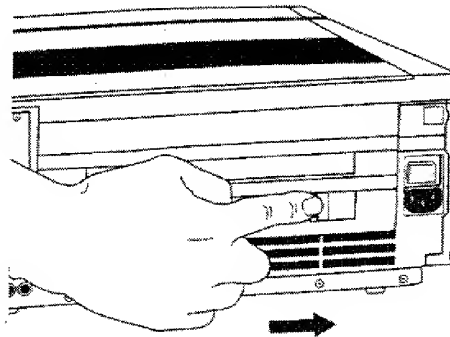
You do not have to turn off projector power before switching lamps. As you move the LAMP SELECTOR switch to its opposite position, you'll feel the switch click into place. The alternate lamp will illuminate, coming to full brightness slowly to extend the life of the lamp.

fig 25. APS

### Replacing Lamps

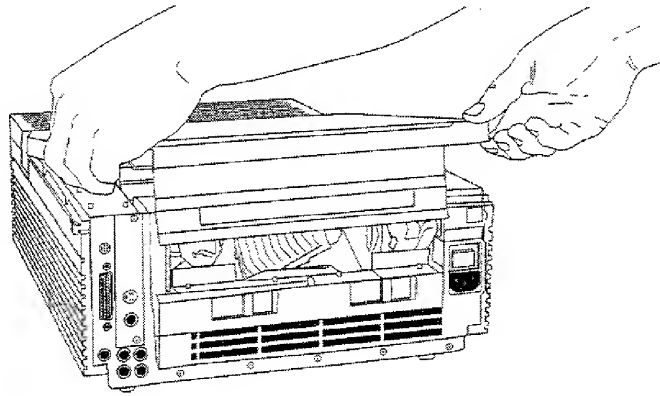
Leave the Desktop Projector running with the lamp *off* prior to changing lamps. This will allow the fan to run and speed the cooling of the lamp chamber. Don't open the lamp chamber until the projector has cooled.

1. Turn off the projector, unplug the power cord from the wall socket and remove the power cord from the projector's power receptacle. As a built-in safety feature, the lamp chamber cannot be opened unless the cord is removed.
2. Move the lamp chamber latch to the right. The cover panel will "pop" open.



**Figure 31**  
Opening the lamp chamber latch

3. Lift the cover until it stops. *Do not force the cover!* The lamp chamber is now accessible.



**Figure 32**  
Opening the lamp chamber

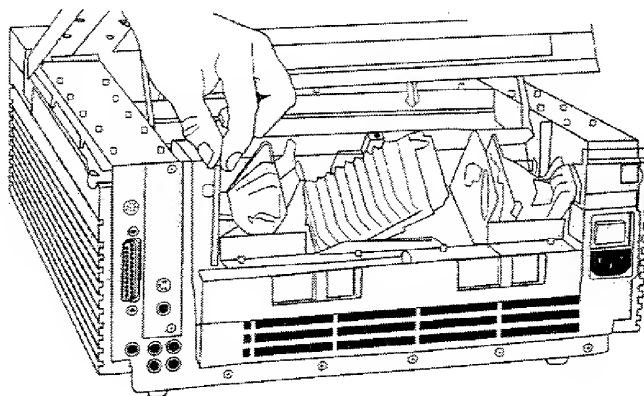


**CAUTION!** The lamp chamber gets very hot during operation. In particular, the ceramic socket at the lamp's base can get extremely hot! Use appropriate care when opening the lamp chamber or changing lamps. Make sure that the lamp chamber and lamp have cooled for at least 6 minutes with the fan running. To do so, press the LAMP button to turn off the lamp and allow the fan to operate for several minutes.



**Note:** Proxima has thoroughly tested replacement lamps manufactured by various vendors. For the most reliable performance, use only General Electric FXL lamps.

4. A lamp release lever is located at the front of each ceramic lamp socket. Push the lever to the outside to release the lamp. Remove the burned out lamp from its socket and replace it with a new one.



**Figure 33**

Push the release lever to release the lamp



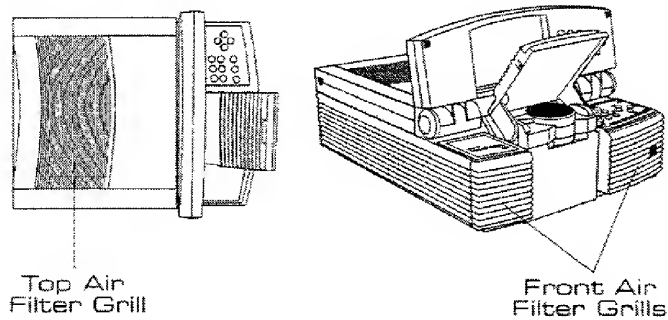
**CAUTION!** Always use a clean cloth or tissue to handle the lamp. Touching the lamp or otherwise contaminating its surface can damage it. If you do come in contact with the lamp surface, clean it thoroughly before use.

5. Close the lamp chamber by firmly pressing the cover down at the center of its upper rear edge until the latch engages. The lamp chamber latch will return to its center position, providing access to the power plug receptacle.
6. Replace the power cord.



## Changing Air Filters

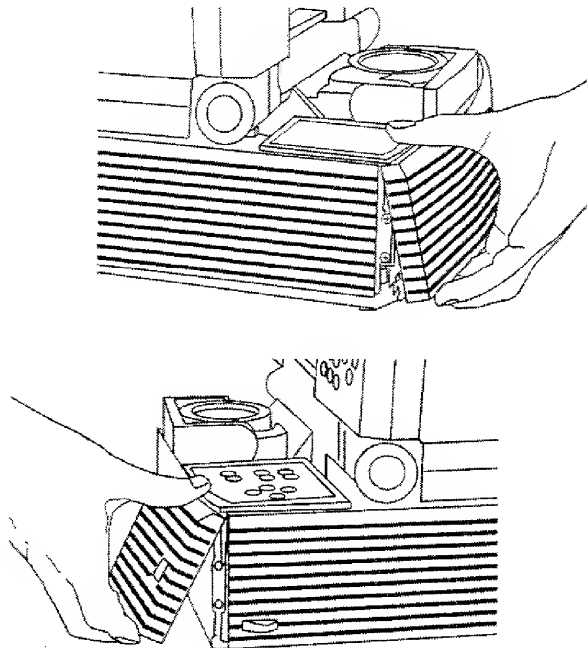
You should change or clean the three air intake filters after every 250 operating hours to assure proper cooling. These filters are located on the left and right sides at the front of the projector's lower case and under the grill in the top cover.



**Figure 34**  
The air intake filter grill assemblies

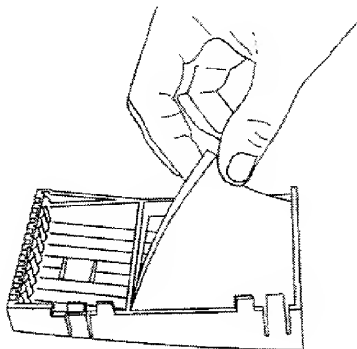
### *Front Air Intake Filter Assemblies*

1. Release latches are located on the lower portion of the two front filter grill assembly frames. Press these up as you pull the grill assemblies out.



**Figure 35**  
Removing the lower front air filter grill assemblies

2. Remove the foam air filters.

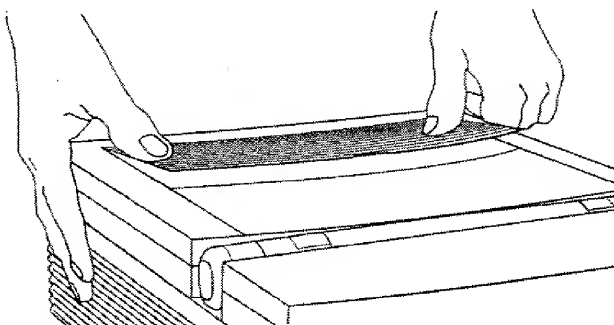


**Figure 36**  
Separating the air filter from the filter grill

3. Depending on their condition, clean or replace the filters.
  - To clean a filter, wash it in a mild solution of soapy water, rinse and let it dry.
  - To replace a filter, refer to *Appendix B: Accessories & Replacement Parts* for ordering information.
4. Clean the grill vents using a cloth or the can of compressed air in the optional maintenance kit.
5. Reassemble the air filter assemblies and replace them.

#### *Top Air Intake Filter Assembly*

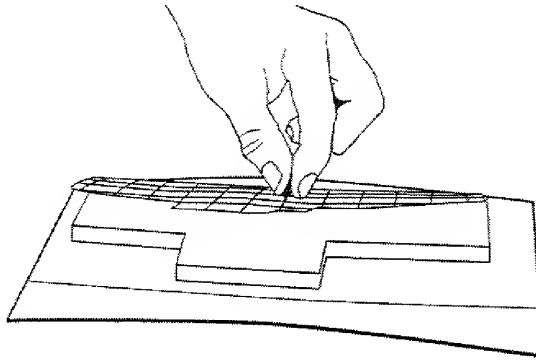
1. To release the top air filter assembly, place both thumbs into the two depressions located on the rear of the top filter grill assembly frame. Press down and back towards the rear of the unit. The front edge of the grill will pop up.



**Figure 37**  
Removing the top air filter grill assembly

2. Grasp the forward edge of the grill and lift to remove it.

3. On the bottom side of the assembly, you will see a retaining grid. Grasp the tab at the center to remove it.



**Figure 38**  
Separating the air filter from the filter grill

4. Remove the foam air filter.
5. Depending on its condition, clean or replace the filter.
6. Clean the grill vents using a cloth or the can of compressed air in the optional maintenance kit.



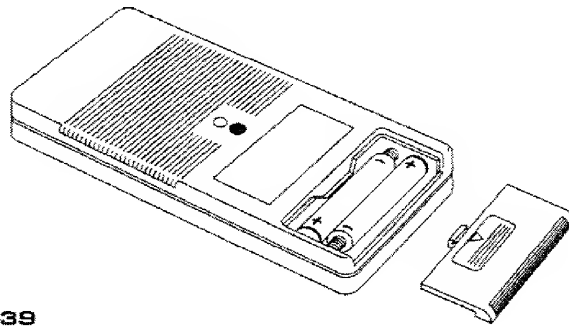
**CAUTION!** Be careful not to aim the stream of air directly towards the projector, as this could force dust particles inside the unit.

7. Reassemble the air filter assembly and replace it.

### Changing the Remote Control's Batteries

To install or change the two AAA alkaline batteries in the remote control unit:

1. Locate the battery compartment at the lower rear of the case. Slide the cover off the battery compartment.
2. Remove the old batteries and replace them with new ones. Make sure to align the batteries in the proper direction.



**Figure 39**  
Installing batteries

3. Replace the cover on the battery compartment.

### Temperature Extremes

The projector should not be stored in excess of 140° F (60° C). The ideal operating temperature is below 80° F (27° C). Before operating, allow the projector to warm up after it has been exposed to extremely low temperatures.

## Chapter 5

### Troubleshooting

Problem	Likely Cause	Possible Solution(s)
No image projected	No power to projector	Turn power ON Check AC cord Check power to electrical outlet
	Lamp not on	Turn lamp ON
	Circuit breaker engaged	Correct overload situation; press circuit breaker reset button to disengage
	OVERTEMP indication	Allow projector to cool; turn projector ON
REPLACE LAMP indication	Burned out lamp(s)	Move lamp selector switch to opposite position Replace lamp(s)
Displayed image not square (keystoned)	Projector not placed at proper angle to projection screen	Adjust relative positions of projector and screen
	Projector not horizontal	Level projector
Projected image out of focus	Projection lens not focused	Adjust projection lens focus
Projected image larger than screen	Projector too far from screen	Move projector closer to screen
Projected image smaller than screen	Projector too close to screen	Move projector away from screen
No computer image projected	Loose cable	Check and secure cable connections
	No power to computer	Turn on computer
	Incompatible video system	If possible, check computer with another monitor
	No external monitor	Use included video terminator appropriate to your system Switch between internal screen and video port

Problem	Likely Cause	Possible Solution(s)
No image on computer screen	Power switch off or projector not on	Projector must be on for computer monitor display
	Cable not connected	Connect cable
Monochrome on color monitor	Computer was turned on before projector	Turn projector on and re-boot computer
	Computer's external video port set incorrectly	Set computer's external port to "color"
Streaks on monitor	Video cable plugged into computer is upside-down	Check and re-set cable connections
Faint screen	Low intensity	Adjust BRIGHTNESS and CONTRAST
Jittery, fuzzy letters	Out of sync	Adjust SYNC control
Image off-center	Position controls (arrow keys)	Adjust position controls; if image will not center, check for compatibility problems
	Compatibility problems	Verify projector is image compatible with one of the standards listed in <i>Appendix A: Specifications</i>
	Misalignment or damage to optical elements	Projector requires servicing
Cannot get entire image on screen; scrambled image	Compatibility problems	Verify projector is image compatible with one of the standards listed in <i>Appendix A: Specifications</i>
"Shimmering" colors	SYNC or BRIGHTNESS out of adjustment	Adjust SYNC or BRIGHTNESS
No video image projected	Video source(s)	Check video source(s) (composite or S-VHS) for power ON and proper operation
	Loose/improper cabling	Check and secure cabling between video source(s) and projector



<b>Problem</b>	<b>Likely Cause</b>	<b>Possible Solution(s)</b>
Colors weak in video mode (NTSC, PAL, SECAM or S-VHS)	Weak video signal	Check for faulty video source, bad connection, or frayed cable
	TINT setting may be too low	Adjust TINT level
Getting excess white or washout in TV video mode (NTSC, PAL, SECAM or S-VHS)	CONTRAST too high	Adjust CONTRAST, then adjust BRIGHTNESS
Black and white image from color SECAM input	Ambiguity in video signal	Access Menu Setup and select SECAM as the video source
No audio	Audio source(s)	Check audio source(s) for power ON and proper operation
	Loose/improper cabling	Check and secure cabling between audio source(s) and projector
OVERTEMP indication	Air vent(s) clogged	Allow projector to cool; clear obstructions from vents  Clean and replace filters as necessary
	Internal fan failure	Allow projector to cool Check for fan and blower operation; service if necessary
Remote Control doesn't work	Batteries upside-down or old	Check battery placement or replace with new batteries
	Projector's IR receiver window blocked	Remove object obstructing red IR receiver on front of projector

**Where to Get  
Help**

If you need help:

1. Check the Troubleshooting Chart.
2. Call your dealer's technical support line and explain your problem.
3. Call Proxima at:

U.S.A. and Canada:

(619) 457-5500

Press 1 for Customer Service.

(619) 457-8542 (Fax)

Outside U.S.A. and Canada:

(619) 457-5500

Press 1 for Customer Service.

(619) 622-0173 (Fax)

Europe:

+31-43-650 248

+31-43-649 220 (Fax)

## Returns

If the Desktop Projector or any of its accessories are determined to be defective:

1. Contact Proxima Customer Service to request a Return Material Authorization (RMA) number.
2. Send the defective unit with the RMA number clearly marked on the outside of the shipping box, freight prepaid, to:

**U.S.A. and Canada:**  
Proxima Corporation  
RMA # \_\_\_\_\_  
9440 Carroll Park Drive  
San Diego, CA 92121

**Europe:**  
Proxima Corporation  
RMA # \_\_\_\_\_  
Horsterweg 24  
6191 RX Beek  
The Netherlands

3. Pack the projector in its original box for safe shipment. If you no longer have the original shipping materials, contact Proxima Customer Service for packaging.

## Appendix A

### Specifications

#### Proxima Desktop Projector 2800/2700

Projector Type	DP2800 DP2700	Portable Multimedia Projector Portable Color Data Projector w/ optional video
Computer Compatibility	Both models	IBM PC, PS/2 and compatibles (VGA, EGA <sup>1</sup> , CGA <sup>1</sup> , VESA 640 x 480, 72Hz)  Olivetti®/AT&T® (VGA, EGA, CGA)  NEC 9801 (VGA, EGA, CGA)  Hercules <sup>1</sup> , Hercules Plus <sup>1</sup>  Apple Macintosh II, LC, Quadra, Centris, Performa and PowerBook <sup>2</sup>  Apple Macintosh Classic, Classic II, compact Macintosh family <sup>3</sup>
Video Compatibility	DP2800	NTSC M 3.58 MHz PAL B, G, H, I 4.42 MHz SECAM 4.43 MHz
	DP2700 <sup>4</sup>	NTSC M 3.58 MHz PAL B, G, H, I 4.42 MHz SECAM 4.43 MHz
Interface Connectors	Computer	DB-25 to appropriate video Y-cable
	RS-232	Full duplex w/ Mini DIN 8
	Cyclops	Recessed card edge connector
	DP2800	Video: Female RCA composite and 4-pin Mini DIN S-Video (Y/C)  Audio: Two female RCA jacks for COMPUTER AUDIO IN; Two female RCA jacks for VIDEO AUDIO IN; Mini stereo jack for AUDIO OUT (low level)
	DP2700 <sup>4</sup>	Video: Female RCA composite and 4-pin mini DIN S-Video (Y/C)

<sup>1</sup> Cables for these systems are not included

<sup>2</sup> Apple PowerBook 100, 140, and 170 require 3rd party external video adapter

<sup>3</sup> Requires 3rd party external video adapter

<sup>4</sup> Requires A195 Video Adapter

Appendix A • Specifications

LCD Panel	Both models	Active matrix color TFT (Thin-Film Transistor)
Resolution	Both models	640 x 480 pixels
Number of Colors	Both models	2 million colors from a palette of 16.7 million colors
Response Time	Both models	30 - 50 milliseconds (typical)
Contrast Ratio	Both models	100:1 (typical)
Brightness	Both models	110 ANSI lumens (typical)
Lamp	Both models	FXL 410 watt Tungsten Halogen Quartz
Dimensions	Both models	13.1" W x 17" L x 5.9" H 33.3 cm W x 43.2 cm L x 14.9 cm H
Weight	DP2800 DP2700	21.3 lbs (9.6 kg) 20.3 lbs (9.2 kg)
Projection Distance	Both models	4' (1.2 m) to 14' (4.3 m) from screen
Screen Image Size	Both models	35" (88.9 cm) to 128" (325.1 cm) diagonal
Lens	Both models	F/5, 260 - 280 mm focus length
Keystone Correction	Both models	Normal at +10.5° projection angle
Audio	DP2800	Stereo speakers, rear facing Dual 3 watt amplifiers Dual stereo inputs (Audio follows Video): COMPUTER AUDIO IN AUDIO IN Low level stereo audio output <i>Note: COMPUTER AUDIO IN and AUDIO IN may be used as microphone input w/ line level signals</i>
Power Requirements	Both models	Auto switching from 90 - 260 VAC, 50 to 60 Hz
Storage Temperature	Both models	-4° F to 140° F (-20° C to 60° C)
Humidity Tolerance	Both models	10% to 85% non-condensing
Approvals	Both models	FCC Class A, UL, TÜV, CSA
Warranty	Both models	One year on parts and labor. No warranty on projector lamp.

Fan noise level < 45dB

## **Appendix B**

### **Accessories & Replacement Parts**

#### **Proxima Desktop Projector 2800/2700**

<b>Accessory</b>	<b>Description</b>	<b>Part No.</b>
Cyclops Camera and Wand	Interactive pointer system	A2060
Dual Intensity Laser Pointer	Activates Cyclops sensor from up to 25' away	A90
Video Adapter	Adds full-motion video capabilities to the DP2700	A195
Desktop Projector™ Soft Carrying Case	Accommodates the Desktop Projector and accessories	A294
Desktop Projector™ Hard Carrying Case	Accommodates the Desktop Projector and accessories	A295
Video Y-Cable	Connects to IBM EGA/CGA, Hercules, Hercules+, and Olivetti DEC video standards	C456-6
Video Y-Cable	Connects to NEC PC-9801 computer	C465-6
Interface Kit	Connects Mac SE or SE/30 to Desktop Projector	A33
Interface Kit	Connects Mac Classic to Desktop Projector	A35
RCA Cable	Male RCA connects DP2800 to male RCA video source	C400-6
BNC to RCA Cable	Connects Desktop Projector to a video source w/ a BNC connector	C468-6
Computer-grade Surge Protector	Protects projector and other attached equipment from power surges and spikes. North America use only. Comes with \$10,000 equipment guarantee.	S100
Video Terminator Kit	VGA terminators	A41
Maintenance Kit	Contains extra halogen lamps, lens cleaning fluid, lens tissue, extra air filters, and can of compressed air	A60

Replacement Product	Part No.
Air Filter, Top	140-00680-1
Air Filters, Front (2)	140-00684-1
Halogen Lamp	160-00040
Power Cord: British	C1011-6
Power Cord: European	C1003-6
Power Cord: Italian	C1012-6
Power Cord: North American	C1002-6
Dust Cover	705-00046-1
S-Video Cable	C466-6
RCA Y Adapter	C496-6
Composite Video/Audio Cable	C497-6
Computer Audio Cable	C498-6
Video Terminator, Macintosh	C935
Video Terminator, VGA	C936
Video Y-Cable: MAC II/IIx/LC/Quadra	C464-6
Video Y-Cable: VGA	C454-6
Programmable Remote Control, DP2800/DP2700	A26

You can order accessories and replacement parts through your local dealer or by contacting Proxima at the following numbers:

**U.S.A. and Canada:**

(619) 457-5500

Press 1 for Customer Service.

(619) 457-8542 (Fax)

**Outside U.S.A. and Canada:**

(619) 457-5500

Press 1 for Customer Service.

(619) 622-0173 (Fax)

**Europe:**

+31-43-650 248

+31-43-649 220 (Fax)

## Index

---

### A

Applying Power to the Projector	2-21
Arrow Keys	3-2
AUDIO OUT	2-18
external speakers	2-19
external stereo system	2-20
AV Tripod	
attaching	2-6
precautions	2-6

### B

BRIGHTNESS Control	3-2, 3-6
--------------------	----------

### C

Changing Air Filters	4-7
Cleaning	
projection lens	4-2
projection mirror	4-2
Closing the Projector	2-7
COLORS	3-10
Computer	2-10
Computer Audio Cable	2-16
COMPUTER AUDIO IN	2-16
Conflict, internal screen/video port	2-12
Connecting	
computer audio	2-16
projector	2-9
video audio source	2-16

Connector Panel	2-9
AUDIO IN	2-16
AUDIO OUT	2-18
COMPUTER	2-10
COMPUTER AUDIO IN	2-16
RS-232	2-13
S-VHS	2-15
VIDEO IN	2-14
CONTRAST	3-8
Control Panel	
arrow keys	3-2
configurations	3-1
Cover Assembly	2-3
Cyclops	3-3
light measurement sequence	3-3

### D

Desktop Projector	
closing	2-7
components	2-1
connecting	2-9
desktop computers	2-10
Macintosh connections	2-11
VGA and Macintosh connectors	2-10
VGA connections	2-11
opening	2-2
positioning	2-27
transporting	2-8



## **E**

External Speakers	2-19
External Stereo System	2-20

## **F**

Factory Defaults	3-12
FREQUENCY	3-11
Front Air Intake Filter Assemblies	4-8

## **I**

IMAGE	3-9
Image Size	2-24

## **K**

Keystoning	2-26
------------	------

## **L**

LAMP Alert Light	3-14
LAMP Key	2-23, 3-2
Lamp Release Lever	4-6
Lamps	4-3, 4-4
LANGUAGE	3-11
Latching Slide Switch	4-4
Levels Menu	3-6
BRIGHTNESS	3-6
CONTRAST	3-8
RGB Controls	3-7
SYNC	3-7
TINT	3-7
VOLUME	3-7

## **M**

Macintosh Connections	2-11
Maintenance Kit	4-1
Menu Window	3-5
Levels Menu	3-6
saving changes	3-5
selecting and changing settings	3-5
Setup Menu	3-8
Microphone	
AUDIO IN	2-18
Mirror Assembly	2-4
MUTE Key	3-16

## **O**

Opening the Projector	2-2
OVERTEMP Warning Light	3-13

## **P**

PAUSE key	3-16
Positioning the Desktop Projector	2-27
PROJECTION	3-10
Projector Lens Focus Ring	2-25
Proper Air Flow	2-22

## **R**

Remote Control	3-15
MUTE key	3-16
REV, PAUSE and FWD keys	3-16
TEXT key	3-16
Replacing Lamps	4-4
RGB Controls	3-7
RS-232	2-13

## **S**

S-VHS	2-15
SETTINGS	3-12
Setup Menu	3-8
COLORS	3-10
FREQUENCY	3-11
IMAGE	3-9
LANGUAGE	3-11
PROJECTION	3-10
SETTINGS	3-12
SOURCE	3-9
STORE?	3-11
SOURCE	3-9
Special Configurations	2-13
Specifications	A-1
STORE?	3-11
Switching Lamps	4-3
SYNC	3-4, 3-7

## **T**

TEXT Key	3-16
TINT	3-7
Top Air Intake Filter Assembly	4-10
Transporting the Projector	2-8
carrying handle	2-8
Troubleshooting Chart	5-1
Turning On/Off the Lamp	2-23

## **V**

VGA and Macintosh Connectors	2-10
VGA Connections	2-11
Video Adapter	2-15
VIDEO IN	2-14
Video Terminators	2-12
Video Y Cable	2-10
VOLUME	3-4, 3-7

## **W**

Warning Lights	3-13
----------------	------

**Proxima Corporation**

Main Office:

9440 Carroll Park Drive  
San Diego, CA 92121-2298  
(619) 457-5500

In Europe:

Horsterweg 24  
6191 RX Beek  
The Netherlands  
+31-43-650 248

